

The War at Sea, 1914-1918

The Official German Naval History of The World War

GERMAN
REPUBLIC OF WEIMAR
BETH-SALA, NORTH-SEA

THE WAR IN THE NORTH SEA

Volume I

From the Beginning of the War to the First of September, 1918

Published by E. A. Sauter and Son, Berlin - 1922

Part 2

Chapters 5-6



U.S. NAVAL WAR COLLEGE

1922

AD/A-003 032

THE WAR IN THE NORTH SEA. VOLUME I.
FROM THE BEGINNING OF THE WAR TO THE
FIRST OF SEPTEMBER, 1914. PART 2.
CHAPTERS 5, 6; APPENDICES 14-21;
CHARTS 18-35

Otto Groos

Naval War College
Newport, Rhode Island

January 1937

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE

**Best
Available
Copy**

Security Classification

AD/A-003032

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Naval War College Newport, Rhode Island		2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED	
		2b. GROUP	
3. REPORT TITLE The War in the North Sea. Vol. I. From the Beginning of the War to the First of September, 1914. Part 2.			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Research Paper			
5. AUTHOR(S) (First name, middle initial, last name) Otto Groos			
6. REPORT DATE January 1937		7a. TOTAL NO. OF PAGES 220	7b. NO. OF REFS Numerous
8a. CONTRACT OR GRANT NO.		9a. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO.			
c.		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT Distribution of this document is unlimited.			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY Naval War College Newport, Rhode Island	
13. ABSTRACT <p>Translated from the official German naval history of the First World War, this account is based upon the war diaries of the commanding officers involved and makes extensive use of the texts of naval staff memoranda and instructions, operation and war orders, and German wireless messages. Concentrating on the North Sea area, the volume begins with an examination of the background of the conflict and the preliminary German preparations for the war vis-a-vis those of the British Navy, and then proceeds to the early operations of the two fleets during August 1914. The detailed treatment reflects the importance of this initial stage of the contest, in which are exhibited the maritime planning and determinations that set the course of the entire naval conduct of the war: the blockade by Britain and the German employment of the submarine and mine warfare. Relevant appendices, tables, and charts accompany each part.</p>			

DD FORM 1473
1 NOV 65

(PAGE 1)

1<

S/N 0102-014-6600

Security Classification

3444-1538
1/26/37

WITHDRAWN
TECHNICAL REFERENCE LIBRARY
NAVAL MEDICAL RESEARCH INSTITUTE
THE WAR AT SEA, 1914-1918

Prepared by the Naval Archives
E. von Mantey, Vice Admiral C.N.(Ret.),
Director of the Naval Archives, Editor in Chief.

THE WAR IN THE NORTH SEA

^{Ho}
Edited by O. Groos, Commander, G.N., 1882 -
..

VOLUME I ✓

From the Beginning of the War
to the First of September, 1914.

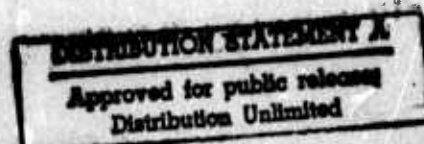
E.S. Mittler and Son, Berlin - 1922.

✓ Part 2 - Chapters 5, 6;
Appendices 14-21;
Charts 18-35.



Naval War College
Department of Intelligence
January, 1937.

2<



This English version of Volume I of "The War in the North Sea" has been made possible by the assistance of certain persons otherwise unconnected with the War College. These individuals voluntarily translated, during their leisure, without remuneration, the chapters noted below.

Chapters 3, 4.	Lt. Charles E. Behrens (MC) U.S.N.
Chapters 6) Appendix 1)	Lt. Comdr. W.E. Findoisen (MC) U.S.N.
Appendices 2-11) " 13-14)	Ens. Otto I. Gelweg, D-F, U.S.N.R.
Appendices 15-19, 21	Ens. Walter A. Hibbs, DV-G, U.S.N.R.

Chapter 1 was translated by the Office of Naval Intelligence. The Preface, Contents, Chapters 2 and 5, and the plates were translated by Lt. R.E. Krause, U.S.N., on duty at the War College, who also edited this volume.

7-28-34
THE WAR AT SEA- 1914-1918

NORTH SEA, Vol. I

Contents

Preface.

1. THE PERIOD OF TENSION AND CONCENTRATION OF FORCES.

The British-German tension of 1913-14. The Emperor on the political situation on 5 July 1914. Conclusions of the Admiralty Staff for the conduct of the High Seas Fleet. Beginning of the exchange of information between the Foreign Office, General Staff and Naval Staff. Serious opinion concerning the situation on 20 July. Declaration of the Naval Staff of 22 July. Entrance of the High Seas Fleet into Norwegian harbors determined upon. Request of the Commander of the High Seas Fleet for immediate return of the fleet to home waters and approval by the Emperor. Return voyage made against the wishes of the Chancellor. The report of the German Naval Attache in London of 28 July. The return voyage of the Emperor and the High Seas Fleet. Stationing the first British Fleet in the North Sea. Indirect preliminary preparations for war by Great Britain since 1904.

Operation studies in case Great Britain should remain neutral. Russian mobilization, German order for "Safety Measures," concentration of British Fleet. War organization of the German and British fleets. Concentration of the High Seas Forces in the North Sea. Naval hindrances through efforts to reach political agreements.

Transition from a peace to a war footing in the North Sea. The security of the German Bight. Policy further impedes military measures. The readiness of the capital ships. Orders bearing on security. Utilization of the Ems position. False air alarms. Commerce during the period of tension. A state of war with Great Britain. First order for operations of the High Seas Fleet.

Note: Chapters 1-4 bound in Part I, Chapters 5 and 6, in Part II.

2. CONSIDERATIONS FOR THE OPERATION ORDER.

Conception of naval supremacy. The location of bases with reference to sea lanes. The advantages of geographical position to Great Britain.

Relative strength. Comparison of ship types. Estimate of the efficiency of personnel. The position of the enemy bases with respect to their own field of operations. The foregoing consideration makes a temporary strategic defensive necessary. The consequences of a possible defeat. The plan of operations.

3. CLOSE OR OPEN BLOCKADE?

The Naval Staff regarding the probable British conduct of the war. Close or open blockade. The form of the close blockade. The form of the open blockade. Guides to the British operations. The defensive attitude of the British Fleet unexpected. Is the desired equalization of forces possible?

4. OFFENSIVE BY GERMAN SUBMARINES, MINE LAYERS AND CRUISERS.

The means for the mine warfare. The undertaking of the KOENIGIN LUISE against the Thames (5 August 1914). Undertaking of the Submarine Flotilla I against the British Main Body (6 to 11 August). Imperial Order to proceed against the troop transports in the Channel (8 August). Advance by Submarine Half-Flotilla 3 against the transport escorting forces in the Hoofden (8 to 11 August).

Conclusion of the Commander-in-Chief of the Naval Forces. Lack of cruisers for the offensive. Proposed operations of the Chief of the High Seas Fleet.

Advance by the U-20 and U-21 against the Peterhead-Egersund line and simultaneous advance of the U-22 against the Humber (15 to 21 August 1914). Deductions as to possible operations of the fleet. Transition to minor warfare. Advance of the light cruiser STRALSUND and STRASSBURG with the U-19 and U-24 in the Hoofden (17 to 19 August 1914).

Advance of the light cruisers ROSTOCK and STRASSBURG and the Torpedoboat Flotilla VI to the Dogger Bank (21 to 22 August 1914).

Mining operations by the ALBATROSS and NAUTILUS against the Tyne and Humber (23 to 26 August 1914).

The effect of the submarine danger upon the movements of capital ships.

5. THE 28th OF AUGUST, 1914.

Increasing the safety of the German Bight. Advances by cruisers and torpedoboats beyond the patrol lines. The danger from submarines, aircraft and mines in Heligoland Bay and off the river mouths. New principles for the security of the German Bight.

The first reports concerning the enemy on 28 August, Measures taken by the Commander of the Scouting Forces and the Fleet Commander. Measures taken by the Commander of the Submarine Flotilla II. Alarm of the coast defenses at Heligoland and Wangeroog.

Engagement of the G-194 and G-196 and the Flotilla V. Participation by the STETTIN. Engagement of Mine-sweeper Division III. The battle of the FRAUENLOB. The sinking of the V-187. The battle of the remaining boats of the Flotilla I. Second battle of the STETTIN. Conduct of the S.M.S. HELA and the Flotilla V.

British reports concerning the events outlined above.

Estimate of the situation by the German leaders after the conclusion of the above engagements. Introduction of a German counter-thrust.

First engagement of the STRASSBURG. The sinking of the MAINZ. Order to the German battle cruisers to go out. The conduct of the German submarines. Estimate of the situation up to 1:30 p.m. by the leaders.

The battle of the STRALSUND. The sinking of the ARIADNE. The STETTIN as witness of the battle of the ARIADNE. The further engagement of the STRASSBURG. Recall of the light cruisers by the Commander-in-Chief.

At the place of sinking of the ARIADNE. Advance of the German battle-cruisers and restoration of the patrol lines.

The report of Commodore Tyrwhitt on the ARETHUSA. Advance of the British battle cruisers according to the report of Admiral Beatty. The destruction of the KOELN. The British attacking forces are brought in by Rear Admiral A.H. Christian.

The losses. The question of calibers.

Tactical and strategical results. The psychological moment. Conduct of the British and Germans in the rescue of men.

6. THE BRITISH BLOCKADE.

Uncertainty regarding the bases, location and movements of the British Fleet. Admiral Jellicoe's statements regarding the British bases. War organization of the British Fleet. The British plan of operations.

The first cruise of the Grand Fleet. The second cruise. The attack by the U-15. The effects of the appearance of German submarines. The first sweep into the southern part of the North Sea (third cruise). The U-21 and the Grand Fleet. Conclusions of the German leaders from the results of submarine scouting. The fourth cruise of the Grand Fleet. Movements of the British Fleet during the battle of 28 August.

The reasons for the holding back of the British Fleet. Effect on developments of the war in the North Sea.

THE WAR IN THE NORTH SEA

1914-1918

Vol. I

Chapter 5.

Published by German Naval Archives

NAVAL WAR COLLEGE
Newport, R.I.
Department of Intelligence and Research
Translated by Lieutenant R.E. Krause, U.S.N.
July 1934

Chapter 5. The 28th August, 1914.

There were no British offensive undertakings similar to the German ones described in the previous chapter. After as before, one remained in uncertainty as to the intentions of the enemy. Even though the time did not appear ripe to the German high command to engage the entire High Seas Fleet, yet the thought of the coming decisive battle occupied the minds of all. In the evolution of the ship types as well as in tactics this aim was preeminent of all considerations even before the war. Now all efforts centered in the preparation of the fleet and the security of its approaches for the decisive battle. Due to being fettered by the operation order, fascinated by the submarine menace, and believing that sooner or later the initiative to battle would come from the heavily superior enemy, we took our own task in too narrow a scope. Next to the offensive activity of the light forces, we took it to be to keep the Haligoland Bight and river mouths clear of British submarines and mines as the deployment area of the fleet for future undertakings. For fear of finding ourselves blocked in the river mouths by submarines and mines on the decisive day, we overworked the torpedoboats and light cruisers in the service of security due to a lack of suitable patrol craft and consequently kept too small a force free to oppose any sudden sortie of the opponent or to participate in own extended scouting and torpedoboat undertakings in the open North Sea. Thereby it was overlooked that the attack is the best defense and that the activity of the whole fleet carried out into the North Sea would at the same time have been the best means to secure the German Bight and the river mouths against operations of the enemy. A decided disparity between the heavy duty of the light forces and the expectant inactivity

of the large ships was a feature of this procedure.

The measures taken for securing the German Bight at the beginning of the war have already been described in detail in the first chapter. Although the holding back of the enemy came gradually to be recognized, this system was essentially retained during the course of August and even more fully developed. After the end of the period of tension and the beginning of the war condition, security was afforded by day on 5 August in an outer and an inner patrol line on each of which was stationed a torpedoboat flotilla on an arc of 35 and 23 miles radius respectively from the lightship, ELBE I. Between these two lines of torpedoboats was another consisting of submarines on a concentric arc of 29 miles radius. A light cruiser was stationed behind each of the north and south flanks and an additional one outside of Heligoland harbor. An escort cruiser with a torpedoboat flotilla was stationed in the Weser in readiness for an immediate advance; three flotillas were berthed in the river mouth. At night the torpedoboats of the outer line as well as the submarines were withdrawn to Heligoland, so that only the inner line of torpedoboats remained out. At daybreak the light cruisers frequently ran in to the river mouths on account of the alleged submarine menace.

The heavy demands on personnel and the light forces, which very soon made themselves felt with this form of security, led on 6 August to a change of procedure for the submarines upon the strong representations of the commander of Submarine Flotilla I, Commander Hermann Bauer. The line of submarines was abandoned and the majority of the submarines were made available for use on the high seas or on the enemy coast. The remainder were retained at Heligoland for the security of the German Bight and were to leave that port only when hostile forces were reported.

With comprehensible envy our torpedoboats, which were trained for the attack as in no other navy, saw the younger sister service gird itself for glorious tasks. Simultaneously with the withdrawal of the submarines from the service of security, a further burden was placed on the torpedoboats. Since the distance of 12 miles between the previous two torpedoboat lines might permit enemy submarines to surface unobserved in between them, it was thought necessary to fill the stations of the submarines for day security with an additional torpedoboat line. In addition, the combatting of submarines in the inner German Bight was to be carried out alternately by a further torpedoboat flotilla and a division of mine-sweepers after Mine-sweeper Division III in Cuxhaven became available for service.

For these details the number of available torpedoboat flotillas was entirely inadequate.

On 7 August the inner torpedoboat line had to be dispensed with in order to make a flotilla available for the search of the German Bight as well as for offensive purposes. In order to compensate for its dropping out, the flotilla on the outer circle received the order not to steam any longer back and forth along the line of the outposts, but with varying courses to cruise in the area which is bounded by the two concentric arcs of 35 and 29 miles radius. The continual availability of one attack flotilla on the Weser also had to be abandoned in order to preserve the personnel, boilers and engines of the torpedoboats, so that their full readiness would be assured for the day when these naval forces would have to meet the demands of battle. No one was in doubt that this utilization of the torpedoboat flotillas had very little relationship to their real purpose and was simply a matter of necessity until a sufficient number of other vessels, which were less valuable and more suitable for the

the release of the torpedoboat flotillas for attack purposes would have been possible before this time only if it had been decided from the outset to effect the security of the German Bight against enemy submarines and minelayers primarily through minefields instead of ships. That did not happen until September; until that time the opinion prevailed that such a minefield would hamper too much the movements of own forces in the battle expected here.

However, the consequence of this procedure once begun was that extended offensive operations could only seldom be carried out, and otherwise we had to limit ourselves to incidental advances from the patrol line. In number of ships as well as in extent, these never attained the measure of large-scale scouting or torpedo-boat undertakings. Even if such advance possibly had not led to an encounter with the enemy, they would probably have given us greater clarity concerning the actual movements of the opponent.

On 6 August the intelligence station, Westellenbogen on Sylt, reported sighting several smoke clouds off Esbjerg. An immediate air reconnaissance gave as little clue to a hostile operation in Fano Bay as an advance of the MAINZ with a group of Torpedoboat Flotilla VIII, which forces appeared off Esbjerg at dawn the next morning.

After an airplane left Borkum on 8 August in a westerly direction to establish how far the British reconnaissance extended toward the German Bight and did not return, the Second-in-Command of the Torpedoboats with the light cruiser ROSTOCK and the Torpedoboat Flotilla I scouted on the night of 9-10 August in the sector west by south to north to about 100 miles from Heligoland. As a fan-shaped advance of the torpedoboats had been designated, the interval between adjacent boats rapidly increased and upon reversing course when 100 miles distant from

Heligoland it was 16 miles. Although it was a moonlight night, it was by no means certain that the relatively small number of boats would suffice to sight enemy forces in such a large area and, if they did, that they could concentrate even a small number of boats for attack. The means with which the advance was carried out were too small. Thus, the best prospect of success for the attackers - other than surprise - is to be stronger than the opponent and this had been relinquished from the start. However, no encounter with the enemy took place. Only one boat, V-189, thought she had sighted two enemy cruisers which she reported between 12 and 2 a.m. in 060 epsilon⁽¹⁾ and 042 epsilon about 80 miles west of Borkum Reef. Later she gave further information that, in addition, she had sighted two large ships, apparently armored cruisers but whose class could not be identified. The boat was attacked by one of the two cruisers but avoided action. The Fleet Commander believed a British mine operation against the German Bight to be indicated thereby and took the reported ships to be cruisers of the APOLLO class. This view was shared by others in the fleet. It was hoped indeed that the sighting of these forces meant the real transition of the British to a close blockade and not merely an isolated advance.

In accordance with the proposal of the Commander of Submarine Flotilla I, the light cruisers HAMBURG and STETTIN with U-20 and U-21 went out at once to damage the reported forces by submarine attacks. However, nothing more was seen of the enemy.

The squares, in which the enemy ships were thought to have been, were suspected of being mined. However, upon subsequent search no mines were found.

(1) Greek letters used in designation of location. See square chart 5.

Furthermore the report of V-189 gave rise to the order that any darkened craft off the Ems is to be considered as hostile forthwith. The attention of the Dutch government was called to the dangers which must ensue if darkened craft appeared off the Ems. When later the airship L-3 sighted a Dutch cruiser and four torpedoboats, the conclusion was reached that the ships reported by V-189 were probably these same craft. On the other hand, the Ems group of Torpedoboat Flotilla II which advanced on the same day as far as 152 gamma and 001 epsilon, saw nothing of these or enemy ships. The Dutch government was requested that henceforth, in order to avoid trouble, the colors be illuminated at night so as to allay any doubt about the neutrality of their ships.

After the large, extended operation of the submarines from 6 to 11 August, U-13 and U-15 were missing. This gave rise to another advance led by the Commander of the Torpedoboats, Rear Admiral Maass, with KOELN and Torpedoboat Flotilla VI on the night of 12-13 August. This was carried out in a similar manner to the advance of the 9th and although extended to 130 miles from Heligoland was again fruitless in every respect.

Not until the night of 15-16 August was a larger number of torpedoboats utilized, and then in the sector north to west-northwest from Heligoland for the purpose of surprising enemy submarines believed to be on station there. KOELN, STUTTGART and Torpedoboat Flotillas I and II participated in this advance again under the leadership of the Commander of the Torpedoboats. At first a further extension than previously was considered but this intention was abandoned in order to prevent an enemy force, which might break through under cover of darkness, from cutting off our own force. Other than bringing in two Danish steamers, FICARIUS and FRAEGANA, which were making passage to English ports with food supplies, this undertaking also brought no result. On the same night a raid of Torpedoboat Flotilla III from the

was reached out in the sector west-northwest to west from Borkum to beyond Terschelling, but was likewise fruitless.

The next day brought the advance of STRASSBURG and STRALSUND in the Hoofden as previously described as well as the raid to the Dogger Bank, while the airship L-3 had made a scouting cruise as far as the Norwegian coast. However, in no place, other than in the Hoofden, were enemy forces encountered.

On the other hand, it appeared that we would be seriously occupied with the submarine menace. Even the fleet anchorage in the Jade and Weser were not considered secure against submarines. Nets were not available until after the first six months of war, and also the blocked ship anchorage in the Elbe, originally contemplated only as a protection against destroyer attacks, did not seem to be effective in providing security against submarines. As long as effective security was lacking, one had to depend above all on the navigational difficulties, which with the depth and current conditions in the Jade and Weser rendered difficult a submarine attack. All capital ships always had their nets out when at anchor, while the lookout and guns were manned for instant defense. For the same reason the security of the river mouths was continually being added to by special patrol craft. Heretofore this security of the Jade and Weser was provided for as follows:

By day the old fisheries cruiser ZIETEN patrolled the Wangeroog fairway, while the old light cruiser ARIADNE together with the target towboat DRACHE lay in the mouth of the Jade, and the station yacht, a former division torpedoboat, guarded the mouth of the Weser. As a support, the old light cruiser NIOBE lay in the channel of the Weser. Thereto the ARIADNE retired at night so as to be less exposed to torpedoboat attacks. ZIETEN was supported at night by two torpedoboats, while three additional torpedoboats were stationed at

night in the mouth of the Jade as well as one boat in the mouth of the Weser (See Appendix 14, The Security of the Jade and Weser by the Harbor Flotilla).

When on 12 August 14 steam-trawlers were ready for service in securing the river mouths, six of these were to increase the security of the Jade and four each to the security of Elbe and Ems. A week later the permanent watch of the mouth of the Ems was assigned to steam-trawlers exclusively, so that the torpedo-boats which until now had been utilized for this purpose became available for more extended reconnaissance. Herein they were occasionally supported by aircraft.

A question, which was the subject of particular consideration, was the security of the submarines lying in Heligoland harbor against aircraft attacks by day and surprise attack by gunfire at night. After 11 August, when four 4.1 inch rapid fire guns were placed in commission on both the west and east moles of the submarine harbor and two 3.5 inch rapid fire guns on the heights commanding the north harbor, a cruiser was detailed at night as a support for the port defense upon the request of the commandant (See Appendix 15, Order of the Chief of the Reconnaissance Forces for the Security of Heligoland Harbor).

Special precautions against submarine and mine danger were necessary when capital ships cruised in Heligoland Bight. When on 11 August the battleship GROSSER KURFUEURST and four training cruisers left the Jade to go through the Kaiser-Wilhelm canal to Kiel for training purposes, while at the same time BLUECHER coming from there was expected in the Jade, the fairway was swept beforehand by Mine-sweeper Divisions II and III, a torpedoboat flotilla formed a submarine screen for the ships, and the Heligoland Bight was patrolled for enemy submarines by numerous aircraft. On another occasion the fairway between the Jade and Elbe was even marked with channel buoys to indicate

movements became more frequent, this was discontinued as the squadrons became familiarized with the passage through the minefields of the Jade and Elbe. On 16 August the battle cruisers went to the Heligoland Bight for exercises, while Squadron I was moved to the Elbe and Squadron II to the Jade. For this reason the security against submarines was so important that as early as 6 a.m. Minesweeper Division III was engaged in searching the German Bight; to be sure, without sweeping gear. The maneuvers of the battle cruisers had scarcely begun when the alarming report came in from the steamer SILVANA, the flagship of the Commander of the North Sea Patrol Flotilla, that she had seen three enemy submarines submerge off the Weser in 147 epsilon. At once the battle-cruisers ran to the Northward in line of bearing at high speed on course north-northeast, and Torpedoboat Flotilla VIII was directed to form an antisubmarine screen on them, while Torpedoboat Flotilla VI set out to chase the enemy submarines in the reported square. When it was established that the report very probably was erroneous - as only "suspicious places" in the water had been observed - the battle cruisers continued their exercises holding gunnery practice. Despite all previous fears in taking the capital ships out to sea, the happy experience provided the necessary encouragement for Squadrons I and II and two ships of Squadron III to hold gunnery practice on 22 August in the inner German Bight and off the mouth of the Elbe. The ships were adequately protected against submarines by torpedoboat flotillas.

Meanwhile an additional number of trawlers had been made available for patrol duty. On 18 August new principles were adopted by the Commander of the Scouting Forces for the security of the German Bight (See Appendix No. 16). Hereafter, besides the previously mentioned line of torpedoboats, seven of these patrol boats were stationed on the line Heligoland-

Sueder-Hever and five on the line Heligoland-Spiekerog, which were to cruise at intervals of 3 to 4 miles to prevent enemy submarines, which might be successful in passing the outer torpedoboat line, from breaking through this position.

In addition, a minesweeper division set out daily from Heligoland to search the Bight for submarines; a torpedoboat flotilla was held in readiness for its support. As soon as submarines were reported in the inner German Bight, they were to be kept down and forced to run down their batteries and to make their existence difficult by steering zig-zag courses. Other means for combatting them were not available at that time.

Usually three cruisers were stationed behind the line of patrol boats; one escort cruiser with one of the two Commanders of the Torpedoboats was ready to get underway in one of the river mouths. At night the outer torpedoboat line retired to an arc of 25 miles radius from ELBE I lightship, while the stations of cruisers and patrol boats were the same as by day. At night an additional light cruiser guarded Heligoland harbor, while a torpedoboat flotilla maintained itself in instant readiness there to put out and attack. During the day this task fell to the available submarines. To this end the Commander of Submarine Flotilla I issued an order on 25 August which provided for the immediate occupation of a line south of Heligoland 12 miles long with five submarines and another east of Heligoland 9 miles long with four submarines. The rest of the submarines were to concentrate southeast of Heligoland in square 158 epsilon (compare sketch and order of the Commander of Submarine Flotilla I concerning the action of the submarines in the event of the sudden approach of the enemy toward Heligoland - in the appendixes No. 17 and 17a). All light forces had positive orders to prevent by all means any blocking operations against Jade, Weser and Elbe.

Besides the harbor flotilla a light cruiser of the fleet with one torpedoboat flotilla was stationed on the Ems, in addition to the old light cruiser ARKONA and four trawlers. The torpedoboat flotilla had the particular task of strengthening at night the watch of the Ems by the patrol boats. Hence a group of torpedoboats was stationed off the river mouth ready to attack minelayers and cruisers, on the other hand they were to avoid destroyers if they were convinced that no heavy forces were following them. The rest of the flotilla was to get underway from Borkum roads at once upon the report of the sighting of hostile forces. At dawn the whole flotilla, if possible, went to Emden for recreation or anchored on the Ems, then to take up their stations again at dusk. The cruisers alternated in taking the guard duty (see appendix No. 18, Order of the Commander of the High Sea Forces for the watch of the Ems).

From these details it is apparent how great was the demand on the light forces at this time for the security of the German Bight and the river mouths alone. On this duty there were no less than four cruisers, two torpedoboat flotillas and one minesweeper division by day; five light cruisers and three torpedoboat flotillas by night. On an average in the month of August the flotillas had only twelve days in port for cleaning boilers, fueling and recreation. Yet the guard duty was still further increased, when a submarine attack on G-111 on 25 August just outside of Heligoland indicated the presence of enemy submarines off and even inside of the patrol line. After a conference of the Fleet Commander with the Commander of the Scouting Forces, it was directed that by day triple patrol lines, by night double patrol lines, be laid out. The existing torpedoboat screen was advanced farther out to a distance of 25 miles from Heligoland; a middle patrol line of one minesweeper division was stationed at a distance of about 12 miles from the outer screen; behind them in the previously mentioned

positions were the trawlers (see appendix no. 19 - Security Order of the Commander of the Scouting Forces of 26 August). Since one of our submarines had not been able to break through a triple guard off the Moray Firth, it was believed that the adopted measures now secured the German Bight against the penetration of enemy submarines. On 26 August also the half of the patrol boats off duty undertook the first attempts to block the Bight with nets.

An aircraft report that at 6 p.m., 27 August, an enemy destroyer had been sighted about 50 miles west of Texel running on course southwest at high speed occasioned also the strengthening of the Ems guard for 28 August with an additional torpedo-boat flotilla, which was to arrive there on that date.

* * * * *

Such was the security of the German Bight, when at 5:30 a.m., 28 August, Torpedoboot Flotilla I with a total of nine torpedo-boats had moved from the night to the day patrol line in accordance with the plan. The sea was calm with light airs from northwest. The sky was overcast, the weather dreary, while the boats took up zig-zag courses on the patrol line. Suddenly, shortly after 6 a.m., G-194, Captain, Lieutenant Commander Buss, on her position about 16 miles northwest of Heligoland, sighted only 55 yards to starboard two periscopes of a submarine, which disappeared again at once, while a heavy swirl disclosed the discharge of a torpedo. Immediately thereafter were sighted the wakes of two torpedoes, which ran under the boat. With hard-over rudder and high speed, the Captain turned toward the submarine which, however, disappeared unhindered below the surface on northwesterly course. Concerning the incident he at once sent the following radio message to Commander of the Torpedo-boats on the KOELN:

"At 6 a.m. attacked by submerged submarine, square 142 epsilon center, two torpedoes, no hit. Sighted periscope.

distance 50 yards. False report out of the question. Enemy submarine steered northwest." (1)

There was nothing extraordinary in this report because enemy submarines were a part of the every-day experience of patrol duty. At once, however, the planned defense against submarines took effect. At 7:10 a.m. the order went out simultaneously from the Commander of the Torpedoboats and from the Commander of the Scouting Forces to Torpedoboot Flotilla V at Heligoland to give chase to the hostile submarine, and at 7:12 from the latter to the aircraft division to have aircraft participate in the pursuit. However this submarine report took on added significance, when from 8 a.m. on urgent radio messages from G-194 and the adjacent boats in the patrol line to right and left of her, G-196 and V-187, came in. These reported the appearance of enemy surface forces in the patrol area - the first experience of this kind since the beginning of the war! (2)

Up to 9 a.m. the High Command formed a picture somewhat as follows from these reports:

At 8:06 G-194 reported that she is being attacked by an enemy heavy cruiser. However, this radio message was received

(1) On first receipt of the radio message 2:25 a.m. instead of 6:05 a.m. was reported, necessitating a counter-question of the KOELN and a repeat-back of the whole messages.

(2) See appendix No. 21: "The radio messages of 28 August 1914." Almost without exception the radio messages were sent in code, the individual recipients took various times in decoding according to their volume of work, so that the times of delivery of a radio message on the bridge or to the Commander vary on an average about 10 to 15 minutes. Furthermore for the uninformed it should be remarked that the radio messages are not only heard by the particular recipient addressed but in general simultaneously by all ships, torpedoboats, and shore stations on the same frequency. Thus, except for stations on other frequencies, it was assured that the most important radio messages, which were also relayed on other wave lengths, were received simultaneously for the information of all concerned, except for the previously mentioned difference in time of decoding.

See square chart (chart 5) for the designation of location by means of three numbers and a Greek letter.

Likewise, not until 8:25 could this boat transmit the report that since 8:05 detached enemy forces had been sighted in 142 epsilon on course south. As is shown by a report at the same time from the adjacent ship on the right, G-196, hostile cruisers are chasing G-194 in 142 epsilon. According to a signal of 8:35, G-196 also became engaged with individual ships. Meanwhile V-187, the flotilla leader, reported by radio at 8:24 the sighting of two destroyers in 116 beta on course south-southeast; at 8:45 she reported two enemy light cruisers in 132 beta on southeast course; and at 8:50 two more enemy cruisers in 131 beta. After 8:25 it appeared that boats of Torpedoboot Flotilla V also, in particular Torpedoboot Half-Flotilla 9, were taking part in the action in 142 epsilon. At first four, then nine, and finally 20 destroyers and a cruiser are reported, which pursue Torpedoboot Flotilla V. At 8:45 the latter requests cruiser assistance.

The counter-moves of the Commander of the Scouting Forces as the one charged with the security of the German Bight followed the reports in rapid succession, but were hampered on this day by a particularly unfavorable distribution of the light cruisers of the High Seas Fleet. There were by chance on patrol the three weakest ships, FRAUENLOB, STETTIN and HELLA, of which the latter on account of her weak armament could not be considered for a serious action. Also the cruiser leader of the torpedoboats, S.M.S. KOELN, contrary to custom, had put in to Wilhelmshaven for a short coaling period. In that port were also STRASSBURG, STRALSUND and ROSTOCK. KOLBERG lay in the roads. DANZIG and MUENCHEN, coming from the Baltic, had put in to Brunsbittel. (1)

(1) After the grounding of S.M.S. MAGDEBURG at Odensholm on the Russian coast, MUENCHEN, DANZIG and Torpedoboot Flotilla IV, in addition to other ships, were placed at the disposal of the Baltic Commander-in-Chief upon orders of the High Command on 26 August. Upon urgent representations that these forces could not be dispensed with in the security service of the German Bight, the Baltic Commander-in-Chief later released them to the North Sea. Upon their return they stopped at Brunsbittel on 28 August.

to be available to relieve the pursued torpedo boats. STETTIN received the order at once "Chase destroyers"; FRAUENLOB the order "Join advance against destroyers." About 8:50 both ships acknowledged these radio messages. However, STETTIN had already gotten underway at 8:32 on her own initiative upon receiving the radio that four destroyers were in sight, and at 8:58 she reported: "STETTIN going out to meet enemy torpedoboats, own submarines taking attack positions." When hostile cruisers were also reported, KOELN and STRASSBURG were directed to go out at once in support, while KOLBERG was to raise steam quickly, STRALSUND to move out to the roads, and DANZIG and MUEENCHEN were to move down the Elbe from Brunsbuttel. MAINZ, which lay in the Ems, was still being held back

Accordingly, STRASSBURG left port at 9:10 a.m.; KOELN at 9:30. So far as light cruisers are concerned, these measures exhausted all means. Unfortunately at 10:30 a.m. on this day there was low water on the bar of the outer Jade, so that capital ships, in particular the battlecruisers, according to the previous experience of the pilots and upon measurement, could not cross this bar during the period from 8 a.m. to 1 p.m. Because of this circumstance the battlecruisers did not receive the order of the Commander of the Scouting Forces to raise steam until 9:20. All except BLUECHER were in the Wilhelmshaven roads. At 12 noon MOLTKE and VON DER TANN could be ready to get underway, but SEYDLITZ, the flagship of the Commander of the Scouting Forces, could only run the starboard engine, as the port main condenser was being retubed. By that time BLUECHER could pass through the locks from the inner harbor. Upon inquiry to the Fleet Commander if MOLTKE and VON DER TANN could go out in support as soon as they were ready, this was approved with the qualification: "If enemy then is still there."

battleships, since from the information thus far received the Fleet Commander considered that it was purely an attack of a large number of destroyers and a few light cruisers. The report of G-194 about the sighting of heavy cruisers without designation of location, otherwise uncorroborated from any other source, was from the beginning not seriously considered. The estimate of this information was in fact correct, since the boat, as appears from her war log, had sighted only light cruisers. However, the false information might have had an exceptionally good result in this case, if it had led the Fleet Commander as well as the light forces to timely consideration of the possibility of the presence of large ships as well. Perhaps other courses would have been indicated thereby from the start for the action of the light cruisers as well as for the utilization of capital ships.

The only battleship on guard duty was S.M.S. HELGOLAND. She left Schillig roads at once for the outer Jade, but inside of the bar, to take up a covering position. As her relief S.M.S. THURINGEN got underway at 9 a.m. from Schillig roads and went down the Jade. The other two ships of OSTFRIESLAND class, together with four ships of KAISER class, lay in Wilhelmshaven roads, while the ships of the POSEN class were in port. There in dock was also the fleet flagship FRIEDRICH DER GROSSE. Squadron II was in the Elbe and the ships of KOENIG class were still at Kiel for trials, where were also Squadrons IV, V and VI.

Upon the first reports of the enemy, the ships of Squadron II, at that time commanded by Vice Admiral Scheer, were put on one hour's notice in case the battleships should be called out. Whether similar measures were also taken independently by the other squadrons is not indicated in their war logs; such a measure was not ordered by the Fleet Commander.

The Commander of Submarine Flotilla I was on board S.M.S. HAMBURG, which was in dock unavailable for service; thus the direction of the submarines fell to the Commander of Submarine Flotilla II on STETTIN off Heligoland. The directives therefor were laid down in the previously mentioned order of the senior flotilla commander commanding Submarine Flotilla I (appendix No. 17). Accordingly at 8:23 the order went out to the submarines at Heligoland to take up the pre-determined attack positions.

Six submarines lay at Heligoland, but not all could get ready at once, as they held torpedo practices on the four preceding days and the boats were now engaged in overhaul work. Two boats could only run on battery.

"For this reason, and because immediate action seemed necessary to me in view of the spirited gunfire which I heard in a westerly direction," thus the Submarine Half-flotilla Commander, Lieutenant Commander Spindler, explains in his war log, "I did not wait until all the submarines could be ready, but gave individual orders to each as soon as she could cast off. The submarines left at the following times: 9:09 a.m. U-16 with the order to proceed to square 142 epsilon and there at her own discretion to seek opportunities to attack enemy craft of any sort. U-25, available in near vicinity with only battery power, received the order to take up position on the northern end of submarine line II, which ran in approximate direction Heligoland-Weser lightship (see appendix 17a) - a line which had been established by Commander Submarine Flotilla I for the event of an enemy surprise attack.

"Meanwhile we heard a gun battle to the southwestward, wherefrom I concluded that the operation of the hostile forces was directed against the mouth of the Jade, and therefore gave the remaining submarines orders to take up positions in this direction. At 9 a.m. U-5 went out. U-5 was to take up position off the mouth of the Jade. At 9:16 a.m. U-16 went out

with orders to stand to the southwestward toward the audible gunfire so as to come to grips with the enemy forces advancing to the mouth of the Jade or returning from there."

The boats of Submarine Half-flotilla 4, U-24 and U-28, proceeded in a similar manner. About 8:20 a.m. these had left for target practice and surface cruising to Loreley Bank and were already in the exercise area, when S-101, the leader of Submarine flotilla 4, steamed up at maximum speed and gave her orders: "U-28 take up action position at Weser lightship, U-24 action position 6 miles northwest Weser lightship and operate at own discretion." The run of the submarines to thence was covered by the Submarine Half-flotilla Commander, Lieutenant Commander Prause, with the leader boat- in connection therewith he intended to scout from 158 epsilon to the westward.

When the first radio reports of the enemy came in and when at 8:30 a.m. gunfire was heard on the island of Heligoland, the alarm was first of all sounded to man the 8.3 inch guns and the mole batteries, but at 8:50 the whole fortress was at action stations. Immediately thereafter torpedoboats were sighted from the island, some of which were steaming past toward the north harbor, some to the westward of Heligoland, but due to the hazy weather they could not make out whether these were British or German boats.

Since 8:25 a.m. gunfire had also been heard on Wangeroog to the northward. It came closer and quickly increased. Finally up to 17 salvos per minute were counted. Action stations were taken on the fortifications. After 9:00 o'clock, however, the gunfire grew weaker and gradually withdrew in a northwesterly direction.

* * * * *

Meanwhile the first actions were taking place at sea.

After warding off the submarine attack at 7:57 a.m., G-194 was in her patrol area on northwesterly course when shell impacts disclosed the presence of hostile forces without at first being able to make them out due to the low visibility of only two miles. Recognition signals given with the search light were now answered. The Captain, Lieutenant Commander Buss, therefore reversed course and ran away from the enemy at maximum speed on course southeast. Not until a quarter of an hour later could he make out that the hostile force consisted of about 9 destroyers and 2 light cruisers; the boat could not reply to the heavy fire of the destroyers. The first shots hit the water 2200 yards astern of the boat, but then the impacts gradually came closer until very soon they straddled the boat. Unfortunately, although calling the flagship KOELN in vain since 8:05, it was not until 8:25 that the Captain was able to notify the Commander of the Torpedoboats by radio concerning the happenings.

The adjacent boat to the Northward, G-196, the leader of Torpedoboat Half-flotilla 2, had not had G-194 in sight, due to low visibility and an interval of 7.5 miles from boat to boat in the patrol line. However, at 8:05 she heard firing to the westward and ran at high speed toward the gunfire. Then after sighting the enemy she headed for Heligoland at full power. At 8:15 the following radio message was transmitted to KOELN: "G-194 is being chased by a cruiser in 142 epsilon."

At 8:26 G-196 also opened fire with the after gun at 7650 yards range, but due to the long range and bad spotting conditions the firing was broken off after 14 shots. This boat saw only one cruiser and this one only right at the beginning, as the latter fell behind the destroyers which pursued the German boats in a close-order, normal line of bearing at at least 28 to 29 knots, but their class could not be made out. Only

scattering shots fell near G-194; the boat remained entirely undamaged, as meanwhile the approaching Torpedoboat Flotilla V, Commander Knesebeck commanding, had drawn the fire of the opponent (see chart 19).

At 7:25 a.m. this flotilla had received orders to chase the enemy submarine in 142 epsilon. Accordingly the boats left at 7:45 and were proceeding separately in irregular formation at 21 knots on the run to the center of the designated square, when at 8:25 the leading boat, G-9, sighted several torpedoboats and noticed the flashing of gunfire. In doubt as to whether or not they were own boats, the Captain, Lieutenant Commander Anschutz, continued to steer the former course until they were recognized for certain by the bridge set well forward and large funnel in the center to be four British destroyers. At once fire was opened with both guns and soon thereafter course was reversed so that a retiring action at maximum speed developed with the four destroyers at 7650 to 8750 yards range, on the right flank of the latter a leader cruiser could now also be made out. Due to the hazy weather the German boats following astern of G-9 were also surprised by the appearance of the enemy. When V-2 saw the shells falling around G-9, they believed at first that the latter had sighted the hostile submarine and taken her under fire, while V-1 upon sighting a low column of water near G-9 at first presumed that a torpedo shot had been fired at the latter, until immediately thereafter the outlines of four destroyers were recognizable. However, these appeared so similar to our boats, particularly from ahead where the raised funnel and the mast placed well forward were not so noticeable that the enemy fire had to allay the last doubts as to their flag.

The collision with the enemy would have been less of a surprise if the first radio report of G-194 had been delivered

The leader finished decoding the first radio message from G-194 at 8:10 a.m.; G-9 was not fired at until 8:25 a.m. Thus there would have been sufficient time thereafter to advance more cautiously and with the boats in close order.

However, our boats beat a timely retreat and withdrew from the pursuit in the direction of Heligoland. The enemy was unsuccessful in his attempt to drive them toward the Holstein coast. Nevertheless, the low speed of our boats in comparison to the destroyers very soon became noticeable, all the more so because ours with the exception of the boats of Flotilla V with mixed firing, were purely coal-burning and after such a short time since leaving port the fires were not as yet sufficiently high. A further consequence thereof was the heavy smoke development which hindered the fire of own guns; to be sure, it also made it difficult for the enemy to see their target.

Before reversing course the Commander of Torpedoboat Half-flotilla 9, Lieutenant Commander Hoffert, attempted to bring the leader nearer the enemy and to close to a favorable range for own battery; thus the range quickly dropped to 5250 yards. Consequently, since the flotilla was not yet concentrated, the enemy fire was soon directed entirely at his boat. Thus he was forced to turn away and by means of changing course to make it difficult for the enemy to establish his fire. Meanwhile, when more smoke clouds were sighted and the number of observed shell impacts led him to suspect a considerable superiority, the flotilla leader gave the order: "Return to Heligoland!" Thereupon the boats formed in an irregular line abreast with intervals of about 650 yards on course southeast-by-east, returning the fire with the after gun, while the range gradually dropped from 7650 to 5450 yards. Spotting was impossible; furthermore on part of the boats the stern was so far down in the water at the high speed they were making that when pointing right astern the line of sight

with a 7650 yard range setting was below the visible horizon. Consequently the point of aim itself could not be sighted on part of the time. The shots, which at first were fired with the greatest rapidity, were observed to fall short due to the inferiority of our caliber, so that for this reason also fire was checked part of the time. Furthermore, the battle course permitted fire with the stern gun only. Compared to the superior fire of the cruisers and destroyers our own was as good as ineffective, even when the range for own boats dropped to 6000 yards, for V-1 even to 3850 yards, during the action. Thus the amount of ammunition expended in this action of almost three quarters of an hour is relatively small. On certain boats it was only 15 to 17 on others between 20 and 30 shots and only S-13 and V-1, which fell astern due to lack of speed and thus were in action longer, fired 40 and 51 shells respectively. Airplane No. 21, which had meanwhile arrived on the scene of action, observed that the shells from our boats usually fell short.

On the other hand, the enemy's fire, despite superiority of caliber and number of ships as well as good fire distribution, remained relatively ineffective. At the beginning of the action the enemy shells fell short about 850 yards on an average, but later as well the guns of the destroyers largely fired short. A further advantage our boats had was that for the most part the destroyer shells did not explode. The 5.9 inch shells of the cruisers could readily be distinguished from the impacts of the torpedoboats by reason of the heavy yellow detonation cloud.

Meanwhile a light cruiser, apparently FEARLESS, had been made out on the right flank of the enemy, while the number of destroyers had at first increased to ten, then to 18 to 20 belonging to the L-class (three funnels). The opening of the engagement was reported by radio to KOELN at 8:28, as well as

later the approximate number of enemy ships, one cruiser and 20 destroyers, and the location 142 epsilon (8:38).

Despite the superior fire effect and speed of the opponent, the situation of the flotilla did not become critical until two boats, S-13 and V-1, could no longer maintain the high speed. Due to the fires having burned down, S-13, Lieutenant Commander Adolph Muller commanding, finally could make only 20 knots and dropped astern toward the enemy to 6000 yards, V-1 in fact to 3850 yards, so that at 8:45 the Flotilla Commander by radio requested cruiser assistance. S-13 in her position remained undamaged, but V-1 on the left flank of the line abreast was soon completely covered by the enemy salvos.

At 8:50 the first shell, apparently of 4-inch caliber, penetrated the upper deck amidships and fell into the after boiler room, where one man was killed and two were wounded. The compartment had to be vacated and due to the loss of the boiler the speed dropped to 20 knots, so that now the destroyers closed rapidly. Judging by the many shell impacts, they were concentrating their fire on the damaged boat, whose Captain, Lieutenant Commander Siess, could decrease the enemy's possibility of hitting only by steering a zig-zag course; this permitted him also to open fire with the bow gun at times. Soon thereafter the boat received another hit, which tore a large hole in the starboard side plating where the coal fortunately protected the interior. However, the rudder control was damaged and the valve of the forward turbine was torn off by splinters. At the same time several torpedo wakes were observed parallel to the boat; while the plan to fire torpedoes likewise was dropped by the Captain in order to save them as sure hits for a last defense.

At this critical moment STETTIN appeared on the scene of action. As she steamed up at high speed she opened fire on the destroyers, so that the latter had to leave the torpedoboat,

concentrated their fire on the new opponent and at the same time turned away to the southwest.

At 8:32 a.m. when the first report of the enemy came in, STETTIN, with steam on only eight boilers, was lying at anchor in a calm sea to the eastward of Heligoland dune for the protection of the harbor. As a result of the information, she at once proceeded to the reported square, sending at the same time a radio report to the Commander of the Scouting Forces. The visibility was unfavorable and varied between 5500 and 9800 yards; apparently it was better near the surface than at the height of the crow's nest. For this reason Heligoland could not take part in the action, although it took place within range of the island batteries and before the arrival of STETTIN the Commander of Torpedoboat Flotilla V had even requested the fire of the batteries. STETTIN, too, could not make out the enemy until own boats were only a short distance ahead on southeast course pursued by several groups of hostile destroyers. The Captain of S.M.S. STETTIN, Commander Karl August Nerger (who achieved renown later as Captain of the auxiliary cruiser WOLF) reports the following concerning the further course of the action:

"At 8:58 a.m. STETTIN opened fire at 9300 yards on one of the middle groups of the opponent, which appeared to be closest, and at the same time reported to the Commander of the Scouting Forces: 'Am in battle with destroyers.' STETTIN then observed several well placed salvos. At this moment the signal bridge reported that the ships we were firing on belonged to own flotilla. The fire was briefly interrupted; but then the report was found to be erroneous. At this time the groups to westward turned to southwesterly course and retired in column formation at maximum speed.

"Soon thereafter the groups to eastward also turned to westerly course. Since they were nearer, they were then taken

under fire.

"At this time some 20 enemy destroyers armed with 4-inch guns were counted and thereupon report was made to Commander of the Scouting Forces: 'Urgently need support, am in 142 epsilon'.

"For a short time at about 9:05 a cruiser with four funnels was seen behind the enemy formation and this observation was reported to the Commander of the Scouting Forces: 'Enemy cruiser with enemy flotilla.' Whether this cruiser took part in the battle is not definitely established. The impacts of hostile shells were so numerous in the immediate vicinity of the ship that this could not be observed. According to information of the Commanding Officers in Torpedoboot Flotilla V, the impacts gave the impression as if STETTIN were in boiling water."

Thus far the report of the Captain. While STETTIN advanced against the pursuers in this manner, V-1 had opened fire on the retiring foe and apparently made two more hits which were indicated by a column of fire at the center funnel and dark smoke clouds at the stern of a destroyer. The cruiser assistance had arrived just in time for the hard-pressed boat, for without the energetic attack of STETTIN V-1 would doubtless have been lost. Meanwhile Torpedoboot Flotilla V had continued its retirement to Heligoland since with the small caliber of own guns it seemed to the Flotilla Commander that a further gun duel with the destroyers offered little promise and after the turn of the latter to southwest torpedo fire also could not be brought into play. Due to the superior speed of the enemy the necessary position ahead of the hostile forces, and in particular of the escort cruisers, could not be attained.

In this decision Torpedoboot Flotilla V was confirmed by the order received at 9:10 from the Commander of Torpedoboats: "Torpedoboot Flotillas I and V retire to within range of

Heligoland batteries." For the time being the unrestricted engagement of the torpedoboats was doubtless not justified, since worthy attack objectives had not as yet been sighted. Consequently the boats proceeded to the southern entrance of Heligoland harbor.

Meanwhile, in the further course of the action, STETTIN had received only one hit despite the strong enemy fire from numerous ships - it struck at No. 4 gun starboard under the poop and killed two men, one man was seriously wounded and four men slightly wounded. It is remarkable that the destroyers did not undertake a torpedo attack, which to be sure would have required their full engagement, but limited themselves to a protracted and only slightly effective gun battle. However, our own fire effect, too, must be appraised as small. To be sure, the opening range was 9300 yards and the shortest firing range was only 5050 yards, and, although the gunnery officer had established his fire with the third salvo, he had to shift targets a number of times. This was due to frequent changes of formation and the high speed differential of the opponent as well as frequent changes of own course for navigational reasons and the continually changing visibility, so that unfortunately only a few salvos were observed to straddle the various targets. A really effective fire could not be maintained (Chart 20).

Due to the low speed of the ship the steam had temporarily dropped so that her speed had decreased to only 15 knots - the range increased rapidly. At 9:10 a.m. fire had to be broken off. Her task - to support Torpedoboot Flotilla V - had been successfully accomplished. The Captain decided first of all to retire to Sellebrunner buoy, so as not to engage the ship in further actions until all boilers were functioning properly and maximum speed could be made. During the battle certain persons on the STETTIN thought they had seen a large merchant vessel behind the enemy line. This caused the captain to report

that particular area- that is, squares 154 and 155 epsilon - as dangerous on account of mines. As was later found out, there had actually been a merchant vessel in the vicinity of the fighting ships at this time. She was the Norwegian steamer KONG GUTTORM, which had in these days again taken up her regular run between Christiania and Bremen. She was about to pick up a German pilot to the northward of Heligoland when she suddenly found herself in the midst of a hail of shells. She was hit a number of times and unfortunately also three men of her crew were injured by shell splinters. According to the report of the Captain, a British destroyer steamed up at full speed, shooting continually at the steamer, until the latter made her neutrality evident by hoisting the Norwegian flag. Later one of the shells was found unexploded in the ship and identified as British.⁽¹⁾ According to the foregoing, the report of the mining of the designated area was based on an error easily explainable.

The untimely turning away of STETTIN to Sellebrunnen, due to loss of steam pressure and losing sight of the enemy, must be regretted because meanwhile the enemy had run into the middle patrol line and began to roll up the boats of Minesweeper Division III stationed there. Since 8:40, as S-13, one of the rear boats of Torpedoboot Flotilla V could observe from Nathurn buoy. D-8, the division leader, with a few other boats of the Minesweeper Division, was receiving the extraordinarily spirited fire of one British cruiser and the destroyers.

At 8:15 D-8 had heard gunfire to the Northward, but at first took it to be gunnery practice. Then an indistinct radio message was picked up, that a submarine had fired torpedoes and that the reported enemy forces were heading northwestward.

(1) According to Norges Handels Und Sjøfaerts Tidende of 22 September, 1914.

This information confirmed the Division Commander, Lieutenant Commander Eberhard Wolfram, in his decision to remain on his station to fulfill the purpose of his patrol position, that is, to prevent enemy submarines which might surface from breaking through. Unfortunately, as previously stated, the transmission of the radio message of G-194 concerning the appearance of surface forces had been delayed 20 minutes, so that the further events came as a complete surprise to the Division Commander with his boats. He reports as follows thereon:

"At 8:30 a.m. a German flotilla suddenly came out of the haze to the northward; it proceeded at full power to Heligoland. Soon thereafter the pursuing British forces were also sighted and at once we steamed at full power for Heligoland. At 8:40 the British opened fire on D-8. As soon as the hostile craft could be seen more clearly - one cruiser and 10 to 14 destroyers were made out - I opened fire with the port bridge gun and stern gun. As the range was decreasing, I turned to starboard to show the stern to the enemy. However, I could not hold this course for long because I could not expect timely support with certainty to the southward and a cruiser was threatening to cut me off from Heligoland. Therefore I again set course for Heligoland; to be sure I had to accept the penalty that D-8 now offered a better target than before."

Consequently, until 9:30 the boat had to weather a hail of shells at close ranges of 4350 to 1100 yards. The number of these shells was estimated by the Division Commander as 600, while persons on Heligoland, from where they were able to observe only the last part of the action, counted 200 shots. Yet the enemy obtained only five hits because the shots frequently fell far beyond the boat. The majority of their shells did not detonate on striking the water, but ricocheted, tumbling over and over and rising to a height of 22 yards without doing any damage. Also the effect of the first 5.9 inch hit below

the water-line was absorbed by the coal in a full bunker, so that it did not even penetrate the bulkhead to the engine-room but simply bulged it in. Likewise the next hit on the taff-rail did little damage, while however the third, a 5.9 inch shrapnel holed the ship's side like a sieve in the between decks over and under water. Seriously destructive fire was first experienced when a 5.9 inch explosive shell struck the after part of the bridge. It killed the Captain, Lieutenant Weiffenbach, seriously wounded the surgeon, Dr. Scyberlich, and put out of action 15 to 20 men. At the same time auxiliary steam lines under the fore-castle and in the boiler room were broken, so that the boat was completely enveloped in steam. Yet the engines continued to run - to be sure, gradually slowing down - until the boat had disengaged herself and could be taken in tow. Not until Heligoland stood out plainly in the haze and the light cruiser FRAUENLOB was sighted to the southward did the pursuers of the boat abandon the chase and give up hope, after the escape of Torpedoboat Flotilla V, of destroying at least this one detached boat. Doubtless they took her to be a fleet torpedo boat because even from D-5, despite the short range, the enemy could be made out only shadow-like right up to the last.

The 25 year old boat had defended herself valiantly with her obsolete armament of three 2-inch 40 caliber rapid fire guns. 85 shells had been fired at the enemy and a few hits were observed, but naturally the effect of these must have been small. She did not get to fire torpedoes since the range up to the end of the action remained too great for her old torpedoes. For 40 minutes the crew held out against the heavy rain of shells and did all they could to damage the enemy and to take the boat out of firing range. The Division Commander expressed himself thereon as follows:

"The conduct of the personnel was faultless, the spirit in general the highest, to a large degree light-hearted, despite

the fact that no one could count any longer on getting away."

In addition to the Captain and ship's surgeon, 11 men had fallen, one officer and 12 men seriously wounded and 7 men slightly wounded, amongst which was also the officer-of-the-deck, Lieutenant Baron v. Rotsmann, as well as the helmsman and the operator of the engineroom telegraph, who standing beside the Division Commander were hit by splinters from two shells which struck the water directly next to the boat.

With this action began the story of the glorious deeds of Minesweeper Division III but also the grave series of their sacrifices for the fatherland. Like heroes the personnel of the leader-boat as well as the others in the fight took their baptism of fire. Of these T-34 to the northward of D-8 and "T-33, 37 and 35 to the southward, as well as S-73, which was just returning from Heligoland with dispatches, came almost simultaneously with the leader-boat within firing range of the enemy cruisers (see chart 21). All agreed that at first they believed the gunfire was simply target practice and moreover they received no radio messages which might have warned them. (1) Thus they were suddenly engaged by the enemy and were pursued by one cruiser and about 10 to 20 destroyers. With their low speed of about 15 knots there was almost no possibility of escape nor did there seem to be any prospect of doing considerable damage to the enemy with the one available 2-inch gun. However, just as STETTIN had rescued Torpedoboot Flotilla V, so now the light cruiser, FRAUENLOB, relieved these hard-pressed boats - all escaped, to be sure not until T-33 in addition to D-8 had been so severely damaged that both had to be towed to Heligoland.

Some of the details of these actions are as follows:

(1) The oldest small torpedoboats had no radio installation.

S-73, Captain Minensteuermann (1) v. Staden, warned by the shell impacts in the vicinity of the leader-boat, was enabled to make a timely turn away but still was fired upon by the enemy for 7 minutes. On the other hand T-33 very soon was under heavy enemy fire. At 8:10 to north-northeast this boat saw the leader and T-34, chased by the superior foe, heading for Heligoland at maximum speed and firing heavily. At 8:40 the enemy made a turn of about four points to starboard and at the same time opened fire with the forward guns on T-33 which now bore directly ahead. The Captain, Lieutenant (Reserve) Kaehlert, reports as follows concerning the further course of the action: "As I realized that I could not reach Heligoland, I laid my course for the mouth of the Weser directly away from the enemy in order to present as small a target as possible. At the same time I attempted to make it difficult for him to establish his fire by steering zig-zag courses, in which to my mind I was successful since all shots fell to right and left of the boat. Obviously the enemy was closing at high speed and engulfed me in a hail of shot. When he had come to within about 2200 yards at 8:45 a.m. I opened fire at the bridge of the cruiser. It was very difficult to spot the impacts. The gun crew worked very coolly and surely. The enemy closed rapidly and shot at me with all his might from all the boats. My boat replied to the fire as well and as rapidly as could be expected of a 2-inch gun."

At 9 o'clock the first hit was received, killing one man and seriously wounding leading machinist Stute.

At this time the light cruiser FRAUENLOB came in sight to eastward on northerly course, entered into the action at ^{9:08}~~9:10~~ and took the enemy under heavy fire. The report of T-33 then continues: "At 9:12 I saw two of our shells strike the enemy cruiser in rapid succession; one in the forward smoke-stack

(1) Corresponds approximately to a warrant officer of the mine force.

and one under the bridge. It could not be determined whether they caused much damage. At 9:15 a.m. two enemy shells struck my boat in rapid succession. One struck the cowl of the fire-room blower, the other the engine room. Both exploded. Herein two men were seriously wounded and three men lightly wounded. The engine stopped and the water rose rapidly in the engine room. Now I drifted helplessly and the enemy was dashing up at high speed.- Unflinchingly the enemy was fired upon as rapidly as possible. Also FRAUENLOB enveloped the enemy in a heavy fire. I observed two shots of FRAUENLOB strike the cruiser, one abaft the fourth funnel where right afterward a yellowish-red sheet of fire shot out which extinguished a few minutes later; the second at the stern just above the waterline. The enemy had now closed to about 875 yards - it seemed as if the cruiser was going to run me down. Suddenly at 9:20 upon whistle signal of the cruiser (two long blasts) the boats executed a turn of about 8 points to southwest and ran away at high speed, gradually ceasing fire. I fired a few shells after them and then ceased fire. In 35 minutes we fired 60 shots. The enemy disappeared to southwestward, from where I later heard more gunfire."

First T-34, then V-3 and FRAUENLOB passed wire lines and towed the boat to Heligoland. On this boat also the personnel, which could defend themselves with only one 2-inch gun, at no time lost their composure and executed all orders with the greatest presence of mind and celerity. Defenseless against the hostile fire, all exerted utmost energy to keep the boat in action and thereby gave evidence of admirable bravery on that day.

In addition to T-33, the boat to southward of her, T-37, suddenly at about 9:20 a.m. found herself fired at by shells coming out of the haze, while the enemy - at first recognizable only by the flashing of the guns - could not be made out until

he had closed to 2750 yards of the boat. The Captain, Minenstenermann Schweitzer, at once returned the fire and first of all directed it at the second of the four pursuing craft. After about 20 shots had been fired, a heavy steam cloud shot up from this ship and after a few more shots the pursuit was abandoned. The action lasted from 9:20 to 9:45; about 40 shells were fired at the boat without hitting. Also a torpedo fired at T-37 passed close astern.

Meanwhile the enemy, continuing to south-southwest, ran into the next boat, T-35, and opened fire at 5450 yards. Soon salvo after salvo was falling very close to the boat, whose Captain, Lieutenant (Reserve) Ernst Enderlein, contrary to his first supposition, now realized that he had to deal, not with German, but with British ships. Immediately thereafter he made out about 7 to 9 destroyers coming out of the fog-bank - these took the boat under further heavy fire for 10 minutes. Of about 60 to 80 shells, some struck so close to the boat that the spray of the impact fell over the deck, yet she was hit only once and then the night signalling apparatus was shot away. Unfortunately the range remained too great to reach the target with own 2-inch gun. Despite the surprise contact, the crew did their duty to the utmost without being able to defend themselves. On the retirement, the Captain reported to several passing German cruisers that hostile torpedoboats had broken through, and arrived at 11:00 together with T-37 at the mouth of the Jade, from whence the boat later returned to Heligoland.

On the station of T-35 the enemy must have turned to the westward because the two boats still further to the southward, T-25 and T-71, heard the gunfire but saw nothing of the foe and remained on their patrol stations until 8 p.m. without receiving any radio information.

T-31, Captain, Minenobersteuermann Manneck, on the east flank of the patrol line of the Minesweeper Division and two

miles north-northwest of Bellebrunnen, observed the action of Flotilla V and, after a number of shells struck in the vicinity, took refuge in the north harbor. The adjacent boat on the right, T-40, Captain, Lieutenant Commander (Reserve) v. Mossner, had also received a timely warning from G-193 and ran into Heligoland, while the boats on the eastern flank, T-29 and T-36, did not leave their stations until they received direct orders at 3:30 p.m. and returned to Heligoland.

We return now to the attack of S.M.S. FRAUENLOB. This cruiser on this morning was in her proper patrol station north of the Jade. Her Captain, Captain Mommsen, soon realized at the beginning of the action by the many salvos in rapid succession that this gunfire could not be attributed to target practice. At 8:58 a.m. he ran at best speed toward the gunfire and sounded "General quarters." Concerning the further course of the action he reports as follows:

"After a few minutes the torpedoboats, minesweepers, as well as the trawlers on patrol were seen to be running at full speed toward the bases, in particular in the direction of Heligoland. Soon thereafter there were seen in the vicinity of the boats first a few, then numerous impacts, but the enemy could not be made out. Finally there showed up a shining hull of a ship with one mast and three stacks on course west by north firing heavily. Astern of her were about six destroyers, while in column ahead at a certain distance were about an equal number. The boats were very similar to ours so that doubt existed as to their character. Apparently FRAUENLOB was also sighted by the opponent and fire was opened on us at once. Impacts fairly close to the ship soon occasioned the shifting of ship control to the conning tower."

While the minesweepers released from their pursuers were now getting out of danger, FRAUENLOB at 9:08 opened fire on the enemy cruiser at 6550 yards, disregarding the destroyers. The

same course ~~was held~~, closing consequently rapidly on the enemy (see chart 22). When it was clear that the enemy destroyers intended to envelop her and some of these already bore to port of FRAUENLOB, the Captain turned to west-southwest. This movement caused the enemy to maintain rapid fire at once. Oddly enough the enemy destroyers, despite their advantageous position ahead, did not make effective use of torpedoes - at any rate not more than one torpedo track was observed.

Despite the extraordinarily rapid closing to short range and the change of course, the gunnery officer, Lieut. Comdr. Werner Kurth, obtained with the fourth salvo at 9:15 at 4900 yards the first hit abreast of No. 3 stack of the enemy cruiser - a bright flame followed the impact. The hostile cruiser turned away to northwesterly course, while FRAUENLOB followed her on a similar course up to 3500 yards with continuous rapid fire. Although the firing was very much hampered by the impossibility of observing impacts and by a few changes of course, nevertheless further hits could be recognized by the development of large, black smoke clouds. Then, however, the enemy cruiser with her considerably superior speed, which now made itself fully apparent, was able to shake off the stubborn pursuit and soon thereafter she disappeared with the destroyers in the haze. Due to the short range of own torpedoes (2500 yards) and the position for the most part abaft the beam of the enemy, the torpedoes could not be brought to bear.

FRAUENLOB also suffered in this sharp action of only a half-hour at very close range. The personnel casualties were 5 dead, 13 seriously wounded and 19 lightly wounded without counting those superficially injured. These losses were suffered primarily by the gun crews, talkers, range-finder crews and ammunition passers as well as the lookouts in the crow's nest. The engineer personnel below the armored deck escaped without any loss whatsoever.

The enemy fired very rapidly but for the most part short, such that frequently the second ricochet went over the ship without doing any damage. Greenish-black, and in part yellowish, smoke clouds indicated the explosion of shells, yet at this time again it was observed that the larger part of the enemy shells did not detonate.⁽¹⁾ About 10 hits could be counted which caused considerable material damage, yet such as was unessential to the fighting power of the ship. The port, forward corner of the conning tower as well as the after fire control station were hit. Another shell exploded in the forward crow's nest and destroyed the radio yards and the antennas, so that the radio aerials fell down and the radio apparatus was out of commission 1-1/2 minutes after the beginning of the action. After the battle, radio communication was re-established and report made to the High Command concerning the events. Furthermore one 5.9-inch shell tore a large hole in the mine protective deck, while several shells penetrated the ship's side - one of which just above the water-line. Yet, except for the radio aerials, nothing affecting fighting efficiency had been destroyed, and particularly all the guns remained serviceable.

In the opinion of the Captain, the conduct of the crew was splendid. He reports as follows thereon: "The reserves especially are included in this commendation. The extraordinary composure on deck and in the crowded conning tower is particularly worthy of mention. It surpassed by far the composure acquired in the general quarters drills during the short training period. The transportation of the killed and wounded was carried on promptly and orderly during the lull in the battle. Nowhere was moaning or groaning to be heard."

(1) For instance a 4-inch shell after penetrating an air-shaft fell almost expended into the torpedo broadside room without detonating.

After the action an apparently crippled minesweeper with the signal "urgently need assistance" was sighted in the general direction in which the enemy had disappeared. She was the riddled T-33. To keep her from sinking she was at once taken alongside FRAUENLOB as well as by V-3 which had meanwhile come up. After the damaged boat had been thus towed to Heligoland, S.M.S. FRAUENLOB at 11:30 departed for Wilhelms-haven with the dead and seriously wounded on board.

While these actions of STETTIN, FRAUENLOB and Torpedoboot Flotilla V were taking place, the torpedoboats of the outer patrol line with the exception of the previously-mentioned boats, G-196 and G-194, had been left to their own resources. The flotilla leader of Torpedoboot Flotilla I, V-187, out of sight of her adjacent boat on the right, G-194, also received the latter's radio report at 8:05 a.m.: "Am being chased by a large cruiser." Thereupon V-187 headed to the northward for a short time, seeking contact with G-194. However, after a quarter of an hour, instead of the expected own torpedoboot she sighted about 4 points on the port bow enemy vessels on southeast course, speed high, which were at first taken to be destroyers. Therefore she reported by radio to the Commander of the Torpedoboats on KOELN, "Two destroyers in sight 116 beta." In this connection no accuracy can be claimed for the designation of location since the boat had been in the patrol line since the night before and during this time had been able to get no land bearings. Later the ships in sight were recognized to be cruisers and then the report was corrected accordingly. At the same time V-187 turned away and at 24 knots she drew ahead so far that the ships just barely remained in sight. Then she held course east-southeast, maintaining contact, but at 8:35 she lost sight of them (See chart No. 23).

However, at 9:00 V-187 sighted about abeam two other ships to northward on southerly course, speed high, and at a range of 9,850 to 10,950 yards. They were taken to be armored cruisers.

With full power and a change of course of two points to starboard, she was able to evade these forces also and to report them by radio. However this report was not received by the High Command since radio communication was seriously disturbed by the opponent. Furthermore an exchange of signals between KOELN and SEYDLITZ at this time considerably hampered the delivery of contact reports. Consequently all signals were delayed materially. It was also due to this circumstance that the Flotilla Commander, Commander Wallis, and the Captain, Lieutenant Commander Lochler, on V-187, had received no information whatsoever up to this time concerning the forces sighted by the boats farther to the eastward. Thus both officers did not yet reckon with destroyers superior in speed, but only with hostile cruisers with whom contact must of course be maintained. If, however, the information concerning the appearance of large numbers of destroyers had reached them, they would very likely, as the battle report expressly emphasizes, have relinquished further contact and have headed at once for Heligoland. As it turned out, course was not set in this direction until the positive, previously mentioned radio order from the Commander of the Torpedoboats was received directing them to do so. Now it was too late, because, shortly after the gunfire was heard to east-northeast at 9:25, four British destroyers were made out one to two points on the port bow. The latter evidently intended to cut off the boat. Lieutenant Commander Lochler at once turned to south so as to reach the Jade if possible. The enginerooms received the order to give her all she's got. Still the British destroyers came up, however slowly, so that V-187 gradually had to turn off to southwest course. The sudden appearance of hostile destroyers so far to the eastward of own patrol line seemed to indicate that these had already swept through the German Bight from north to south and were now standing

to the westward on their return. Meanwhile, when on the port beam of V-187, they began firing irregularly at about 6550 yards. For the most part, the shots were very poorly placed in deflection and only a single gun consistently fired overs, which passed low over the bridge. V-187 could not return the fire until the range had closed to 5250 yards. Due to the turning away of the boat, the enemy now bore four points abaft the beam and the forward gun could no longer be brought to bear. Still the Captain did not consider the situation of the boat as being unfavorable at this time; for one thing it seemed that the weather was tending to be foggy and would yet enable him to reach the Jade or Ems. Furthermore, running at 28 to 29 knots the boat made heavy smoke which drew right astern and covered the boat from sight. Thus it was presumed that she could maintain herself in this situation against her pursuers for some time.

Suddenly at 9:45 there appeared to starboard in northwest direction two light cruisers with four stacks, running at high speed and apparently escorted by torpedoboats. At first V-187 took them to be own cruisers, as one of them made searchlight signals which the signalmen of the boat read as German recognition signals, but probably they were given to their own destroyers. Soon a spirited salvo firing at 3850 to 4350 yards range left no doubt that a new opponent had to be dealt with. The forward gun returned the fire at once and apparently not without success, but V-187 also received her first hit. Only a reckless engagement of the boat could now save her. All hands with the exception of the fireroom personnel provided themselves with life-jackets and small arms. Concerning the further course of the action, the Flotilla Commander, Commander Wallis, reported as follows:

"It was now clear that V-187 was cut off from own base. I determined to attempt to break through ^{to} Heligoland by attacking the British destroyers to northward. I gave the Captain

the order: "Turn for a passing engagement." The center tube was trained on starboard beam - the torpedo set for a depth of 3 feet - and then the ship was turned to port for a passing engagement to starboard. At the same time all guns kept up a lively fire. The torpedo in the center tube was fired at the second destroyer, but missed its mark."

At first the destroyers, apparently surprised, stopped firing and then in the passing engagement did little damage despite a range of only 2200 yards. Thus the Flotilla Commander and Captain at this time began to believe that the attempt to break through to the eastward might actually succeed. However, just as the boat was abeam of the last destroyer and was about to turn to the eastward, another destroyer division appeared on the port bow. The latter headed for V-187 at high speed, while the destroyers just passed turned by ships to follow V-187 and now an extraordinary effective rapid-fire was directed at her from all sides. One shell struck under the forward 3.5-inch gun and put the ammunition passers out of action; after that it fired only a few more shots. Another shell penetrated No. 4 fire-room, another one and splinters struck the bridge. Then the hits increased with incalculable effects, so that the boat was completely enveloped in smoke and fumes. All boilers were hit; finally the forward turbine received two hits. Steam mixed with black smoke poured out of the hatch and skylight, which seriously hampered the after gun. The report continues: "The Captain, Lieutenant Commander Lechler, standing next to me was seriously wounded and the helmsman was killed. Lieutenant Jasper assumed command. I gave him orders to have explosive charges ready and I myself took the rudder, as it was not manned and since it was very difficult to make orders understood, for the purpose of ramming the last destroyer in the enemy line. The rudder could not be put hard over and there

was not sufficient way on the boat. The stern was on fire. I received a report that the ammunition was expended and thereupon gave the order to place the explosive charges in the compartments designated in the general quarters bill. I received word that the charges were placed. Lieutenant Jasper had the word passed in all compartments. I threw the secret books on the bridge overboard and gave the order to abandon ship."

While this was taking place, the after gun under the direction of Lieutenant Friedrich Braune, who had this battle station, kept up a slow fire on the destroyers. The latter were only firing intermittently and soon put the after gun out of action. Then the rest of the crew jumped into the water and the destroyers ceased firing. Immediately thereafter, following the detonation of the explosive charges, V-187 went down with flying colors and flotilla burgee, while the destroyers, amongst others the destroyer, DEFENDER, put out boats to rescue survivors. In this way the seriously wounded Captain, Lieutenant Commander Lechler, and the Flotilla Commander, Commander Wallis, also wounded, were taken prisoners.

Although fired on by at least one cruiser and eight destroyers which made many hits, the boat did not sink until after the detonation of own explosive charges. Moreover this action took place only about 3 miles from the area in which FRAUENLOB had concluded her action 15 minutes before.

The conduct of the crew in this unequal fight was exemplary; all strove to measure up to the officers in courage, composure, and nerve. The gun and machine gun crews stayed on their stations until the ammunition was expended or their arms were put out of action. The engineers did their duty to the last despite the horror of ceaseless, penetrative hits, increased by the dangers of water and steam. The radiomen also accomplished their assigned tasks, although the transmission of radio messages was rendered particularly difficult

due to strong interruption by the enemy and our own overloaded radio traffic. Even after the sinking of the boat, true comradeship between officers and men was finally sealed in mutual support in the saving of lives.

The other boats of Torpedoboat Flotilla I were more fortunate. As already described, the boats of Half-flotilla 2 to the eastward of V-187 on their retirement very soon fell in with Torpedoboat Flotilla V; while the boats of Half-flotilla I to the southward of V-187 were able to fight their own way through (Chart 19). Thereby the following events were enacted: The next adjacent boat on the left of the flotilla leader on the patrol line was V-188. At 8:20 a.m. the latter sighted a submarine on the surface bearing west-southwest about 8750 yards distant. The Captain, Lieutenant Commander Callisen, headed at once toward the boat at full power and, when recognition signal was not answered, he opened fire at 6550 yards. However, even before the second shot was fired, the hostile boat was almost completely submerged and only twice was the periscope sighted for a short time. As the radio transmitter on V-188 was out of commission, a report thereon could unfortunately not be made. However, the following information was now received from G-104: "Four enemy destroyers 142 epsilon, heading south." The Captain at once appreciated the danger of being out off from Heligoland and set out for that place at full power. About 8:50 the outlines of two four-stack cruisers in column were made out on port beam at 5450 to 6550 yards range. In view of the radio reports, these could only be considered as hostile. V-188 at once turned off two points to starboard but she had already been seen as the leading cruiser challenged her by searchlight which was answered with convenient letters. Immediately thereafter the Captain sighted two more cruisers apparently of the same type further forward, about two points forward of port beam.

He turned off two more points to starboard to avoid them. In doing so he now sighted the adjacent boat on the right, V-190, Captain, Lieutenant Commander Wultz, which a little later formed column on V-188. After another exchange of false recognition signals, the enemy was no longer deceived, and at 9:07 opened fire with well placed salvos at 6550 to 8750 yards. At 9:12 an additional two British cruisers were sighted on port beam and V-190 now reported by radio: "Six enemy cruisers in 132 epsilon." The last two ships sighted participated in the firing for only a short time and then turned off to the westward apparently looking for other boats, while the other cruisers chased in the direction of the Jade. At this time the forward main feed-pump on V-190 broke down, so that the boat could make only 18 knots for the time being. At first during the pursuit only two cruisers continued to fire without, however, making hits, while the other two apparently were firing at targets on their port side. Not until 9:35 did these also take a hand in the action at about 4350 yards range and right afterwards for no apparent reason they turned off to the westward. Shortly before three destroyers were sighted three points on the port bow. At the same time there appeared to the southward the remaining boats of the Half-flotilla, G-197, V-191 and V-189, Captains, Lieutenant Commanders Richard Beitzen, Froelich and Metger. Upon orders of Commander of the Torpedoboats, these had taken course for Heligoland at about 9:10 and had already joined up when at 9:25 they sighted the other two boats in action with hostile cruisers, of these, however, only two could be made out from the leader. Believing that he was cut off from Heligoland, the Half-flotilla Commander on V-191, Commander Tegtmeier, at once took course southeast by east for the Jade and at 9:29 opened fire on the leading cruiser at a range of about 4350 to 6550 yards, so as to relieve above all the hard-pressed boat, V-190. Hits could

time the radio report was made: "Two enemy cruisers 133 epsilon chasing Half-flotilla I."

The forward hostile cruiser answered at once with a spirited salvo-firing of 3.9 and 5.9-inch guns; but the shots of the smaller caliber did not detonate. Neither did the opponent keep salvos in the air, as we usually do, but waited each time for the impact, so that by frequent turns of 1 to 2 points following the flash of the shots we were enabled to evade the impacts. During this time the visibility changed so that even during the action the cruisers could not always be seen equally well. At 9:33 they turned hard to westward and then could be made out as TOWN class cruisers with four stacks and two masts. Scarcely had this movement of the enemy been reported by radio when two more hostile cruisers were sighted, which took V-188 and V-190 under a spirited fire. To relieve the latter boat, V-191 again opened fire on the leading cruiser, which then stood toward her new opponent and took the leader boat under a spirited and, for the most part, covering salvo-fire. In this instant a submerged submarine was suddenly sighted ahead and a second one only 450 yards to starboard; both disappeared again beneath the surface after two shots had been fired at the former at 100 yards range.

Shortly thereafter, at 9:20, the cruisers broke off the engagement for no apparent reason and turned to the westward. This, as well as the sighting of the submarines, was reported to the High Command by radio.

Meanwhile V-188 with V-190, so as not to be cut off from the Jade, had turned toward the destroyers. A short passing engagement took place with them at 7650 to 5450 yards range but apparently neither side scored hits. Once again it was observed that the majority of British 4.0 inch shells did not detonate. After 15 minutes the destroyers, apparently ships of ACHERON

class, turned away, but the German boats did not follow them because the enemy cruisers were still in the immediate vicinity and did not permit the other boats of the Half-flotilla to close in support. After the hostile forces had disappeared from sight, all the boats joined up at 10 o'clock and set course for Heligoland to await further orders upon arrival there under the protection of the fortifications.

During this engagement in the west, Torpedoboat Half-flotilla 2 had restored the patrol line to the northward and eastward of Heligoland. At 12 o'clock noon, however, they also joined up with V-191, so that now all boats of Torpedoboat Flotilla I were concentrated with the exception of the flotilla leader-boat, V-137, and of G-193, Captain, Lieutenant Commander Paul. The latter maintained her position on the eastern flank until 3:30 p.m. and did not retire to Heligoland until after she received orders to do so.

Meanwhile the British destroyers had put out boats at the place where V-187 had sunk and had begun the work of rescue when suddenly a German light cruiser loomed out of the haze and made them scatter with a heavy fire. She was S.M.S. STETTIN and had not recognized the purpose for which the destroyers were gathered there. She arrived on the scene of action only 8 minutes after the sinking of V-187 - too late unfortunately to rescue her.

At 9:50 a.m. this cruiser had received information from the radio: "Enemy cruiser is chasing Torpedoboat Half-flotilla I in 133 epsilon," that the western flank of the patrol line was also endangered by hostile attack and thereupon steamed for this square at maximum speed, which for this old cruiser was only 22 knots. According to the battle report of her Captain, the following transpired:

"At 10 o'clock STETTIN sighted light smoke clouds about 1 point on the starboard bow and at 10:02 turned toward them.

gether in a group on different courses. Thereupon signal was made to Commander of the Scouting Forces, 'A' in action with flotilla in 133 epsilon"; STETTIN turned off to port at 7850 yards and at 10:08 opened fire. The first salvos straddled, so that rapid fire could be maintained. In subsequent salvos a considerable number of hits were observed.

"After about the fourth salvo the destroyers separated in different directions. Two ships went to the northward, four to the southwestward at maximum speed. The latter were pursued by STETTIN but the range did not decrease. Two ships, apparently heavily damaged, remained on the scene. These and the ships that went to the northward were lost to sight right afterwards (see chart 20).

"At 10:10 it became so difficult to make out the group which STETTIN was following that I ceased firing and turned off to northeast so as not to permit the destroyers to surround me, since the visibility was decreasing, a torpedo wake was reported (probably in error) and the prospects of a hostile torpedo attack were favorable.

"The reports concerning the discontinuance and the events of this action could not be delivered until 12:32 p.m., as the radio installation had been put out of commission by hits. It read: "133 epsilon action broken off, chased British destroyers, apparently several damaged."

"Then until 12:18 the courses as shown on the chart were steered to the southwestward of Heligoland for the purpose of giving directions to the submarine line which had meanwhile been laid out.

"The range during the whole action was approximately the same (7650 yards).

"It is not definitely established whether the enemy suffered any ship losses. However, the lying-to of the ships at the place where the action commenced indicates a likelihood

that such was the case. Furthermore, upon passing this place at 1:10, there were found spread over a large area very many things belonging to the British ships (five cutters and just as many dinghys, some in a half-swamped condition, cork life-belts, life-buoys and numerous other objects)."

This conclusion of the Captain of STETTIN is attributable to lack of information of the sinking of V-187 at this place. It is evident therefrom that at the time of his attack on the British destroyers he suspected nothing of the work of rescue these were undertaking. The report closes as follows:

"In the second action STETTIN received a hit in the radio rigging which placed the radio installation out of commission until 12 o'clock, a hit on the after stack (heavy splinter effect) and another hit at gun 3 starboard which struck the ready ammunition but caused only small fire effect. Furthermore, a short shot evidently hit the ship below water abreast of the starboard engine-room without doing any damage.

"The following personnel losses are to be listed: 2 dead, 1 seriously wounded and 8 lightly wounded."

Upon the first radio reports of the appearance of hostile forces, S.M.S. HELA had also steamed from her eastern guard-position to the westward at full power for the purpose of taking part in the fight. However, she reversed course at 11:05 in 139 epsilon, 15 miles southwestward of Heligoland, when she there learned from STETTIN that the enemy had withdrawn to the westward. Her Captain, Captain Paul Wolfram, then endeavored to take up again as quickly as possible his position behind the northern flank of the patrol line, which had been left without support during this time.

Besides STETTIN and HELA the Commander of Torpedoboat Flotilla V immediately upon his return to Heligoland also took measures to bring in Torpedoboat Flotilla I and detailed Torpedoboat Half-flotilla 10, Commander Heinecke commanding, to

carry them out. Thereupon S-13 rendered assistance to the damaged leader-boat of Minesweeper Division III, while V-3 and the other boats of Torpedoboot Half-flotilla 10 at once advanced in a scouting line to southwestward to bring in damaged boats. The scouting line very soon met up with FRAUENLOB which had the heavily damaged T-33 alongside. V-3, G-10 and G-7 remained behind to participate in the work of salvage, while only two boats, G-11 and G-9, continued the search to the southwestward as far as the southern boundary of the patrol line. There the two latter boats turned around and searched to the northward as far as the area of the middle patrol line until about noon they sighted three British cutters adrift and took aboard from these 1 officer and 44 men of the crew of V-187. In this way the place where the boat went down was established. Only after a protracted search in which three other drifting, but empty, cutters were found did the boats return to Heligoland with the survivors. Thus the events which directly followed the British raid for the time being were brought to a close.

If one is to complete the picture from British reports, it should be stated in advance that this can be based primarily only on the very one-sided and fragmentary version of the Admiralty in the TIMES of 23 October, 1914, which contains extracts from the battle reports of the British commanders who participated.

According to this, it was Division 4 of the British Torpedoboot Flotilla III, which first of all chased G-194 about 8 a.m. Following them came the light cruisers, ARETHUSA and FEARLESS, with Destroyer Flotilla I and the rest of Flotilla III. Thus at least two cruisers and 31 destroyers participated in the incursion. Naturally Torpedoboot Flotilla V had to give way before them and even with the later arrival of STETTIN they were not a match. Yet the Commander of these forces on ARETHUSA,

Commodore Tyrwhitt, in complete misstatement of the facts, claimed a German superiority during the action - an attempt which is so frequently repeated in British reports that the deliberateness is scarcely open to question. For instance, he maintains that from 8:57 to 9:15 ARETHUSA received the heavy fire from two German cruisers (one a four and the other a two stack cruiser) and several destroyers; while from our reports it is definitely established that STETTIN did not even fire on ARETHUSA. Moreover, she did not sight the latter until 9:05 and then only for a short time behind the destroyers, but did not get a shot at her. Actually even before STETTIN came into action, ARETHUSA with the leading destroyers had turned to the pursuit of D-8 at 8:40 and did not come into action with a German cruiser until FRAUENLOB participated at 9:08 and the fire was continued until 9:25 at short range. Almost 1000 tons larger, 9 knots faster, and in addition supported by her destroyers, ARETHUSA should have had an easy time with the ship eleven years older than herself. Instead of this, she was hit not less than 35 times ⁽¹⁾ in ten minutes and so heavily damaged that, according to the report of Commodore Tyrwhitt himself, all guns and torpedo tubes, with the exception of one single 6-inch gun, were put out of action for the time being. The Flag Lieutenant fell at the side of the British Commander, and, at No. 2 gun as the result of a hit which ignited the ammunition, a furious blaze broke out for a short time, setting the deck on fire. Apparently the British Admiralty thought the action would not be so serious, otherwise they probably would not have utilized the ARETHUSA at this time since she had been in service only a few days. As the British report expressly emphasizes, the officers and men were still unaccustomed to each other and the whole intricate

- - - - -

(1) MORNING POST of 11-1-19. The Harwich Naval Forces by E. F. Knight.

organization of the ship was not working smoothly as yet. To be sure, FRAUENLOB had been in commission only since the outbreak of war and had reserve personnel on board.

The contention that FRAUENLOB at once turned away in the direction of Heligoland after a 6-inch shell struck the bridge, aside from the correct observation of the hit, is also not in accord with the facts. Despite the numerical superiority of the opponent, there was all the less occasion for doing so at this time as all the fighting qualities of the German cruiser, in contrast to ARETHUSA, were still intact. ARETHUSA reports that "about" this time Heligoland could just barely be made out to starboard. If this is not an error, then it could have been possible only if the heavily damaged ARETHUSA had headed to the eastward for a short time after breaking off the engagement and after losing sight of FRAUENLOB, perhaps to pick up isolated destroyers. However, she did not in any case attempt to renew the fight, nor was she hardly in a position to do so after her guns were put out of action. Moreover, according to the British report all ships now received the order to steer to the westward. At the same time speed had to be reduced because ARETHUSA by reason of her damage could only make 12 knots. At this time the reports came in from FEARLESS that ships of Divisions 3 and 5 of Flotilla I had meanwhile accomplished the sinking of the German flotilla leader. On the other hand, it is uncertain even today whether cruisers - and if so, which ones - participated in the destruction of V-127 as well as the pursuit of the remaining boats of Torpedoboat Flotilla I. According to a statement in the report of Vice Admiral Beatty, it might have been two light cruisers of Light Cruiser Squadron I, that is of TOWN class, which had been detached earlier in the day by their Commander, Commodore (T)⁽¹⁾ Goodenough in

(1) Commodore S = Submarine, T = Torpedo, corresponding to our Commander of Submarines and Commander of Torpedoboats.

order to support several destroyers. These did not rejoin their squadron until 3:30 p.m. To be sure, it still remains incomprehensible that the boats of Half-flotilla I in their actions made out at times as many as six cruisers. This may possibly be due to confusing them with destroyers or there is a discrepancy in the British report. (1)

Commodore Tyrwhitt claims that upon information that Commadore S (2), the Commander of the Submarines, with the destroyers, LURCHER and FIREDRAKE, was being chased by five light cruisers, he again advanced to support with his forces to the eastward until 11:37 when no further information had been received and the forces again found themselves in the vicinity of Heligoland.

At least the time of these particulars must be questioned because according to our reports the last action of the German ships in this phase of the battle was brought to a close at 10:13, while the subsequent action did not start until 11:55. According to this, it can only be assumed that in the hazy weather actions ensued between the British forces themselves and occasioned the call for help from Commodore (S). It is certain, however, that ARETHUSA was not in the vicinity of Heligoland at 11:37 because she was brought to action by STRASSBURG at 11:55 not less than 30 miles to westward of Heligoland. Even with the maximum speed it would have been impossible for her to have covered this distance in the meantime - not to say anything of a considerable reduction of same.

These particulars of the British report contain discrepancies, the explanation of which is still lacking.

We will turn now to the report (published at same time) of Commodore (S) Keyes, the Commander of the British Submarine

(1) The latter is the case. According to the first volume of the official British naval history which has meanwhile been published, the whole Light Cruiser Squadron participated in the first attack on the German patrol line.

(2) Commodore S = Submarine, T = Torpedo, corresponding to our Commander of Submarines and Commander of Torpedoboats.

Flotilla VIII, she had embarked on the destroyer LURCHER for this operation. He corroborates that the observations made by G-194, V-188 and V-191 regarding the presence of hostile submarines conformed with the facts. According to the report, the submarines, D-2, D-8, E-4, E-5, E-6, E-7, E-8 and E-9 of Submarine Flotilla VIII were available for the undertaking. All except three boats were released on the night of 27 August to take up positions, after breaking through the German patrol line, directly off the river mouths so as to hinder the German battle fleet from taking a hand in the operations of the destroyer flotillas. They had the task of attacking at once every battleship or every large cruiser which might venture out. In carrying out same, they were to stay out of sight as far as possible. On the other hand, E-6, E-7 and E-8, which did not advance toward Heligoland until daybreak, 28 August, had a different assignment. In cooperation with the destroyers, they were to offer themselves as bait to the enemy and thereby to draw the German torpedoboats toward themselves and their own forces. ⁽¹⁾ These very daring tactics were rendered feasible only because of the quick diving qualities of the British submarines. It eminently conformed to the previously observed actions of the German torpedoboats, which had actually at all times dashed at full power toward every submarine that was sighted. However, due to the low visibility and the smooth sea, the most unfavorable conditions which a submarine could have, little was seen of them and nowhere did they get in a successful attack. To be sure, E-4 attempted an attack on STETTIN when the latter opened fire on the British destroyers at the place where V-187 went down. Through a chance change of course of the cruiser, which had not observed the presence of the boat, the submarine was thwarted. She had to content herself with picking up the British left behind in the boats and

(1) Particulars in part from NAVY AND ARMY ILLUSTRATED of 7 November, 1914.

In conclusion it may be said that the skilfully conducted raid on the German patrol line, carried out with large means, could up to this time scarcely have come up to the expectations of the British in this undertaking. The attackers had bagged only one torpedoboat of the outer patrol line, while all the other German boats despite strong pursuit were able to reach their bases. The damage and the losses of the German side were small- only D-6 and T-36 had suffered considerably. On the other hand, the attacker was forced to quit the field due to the fire effect of the materially, as well as numerically, far inferior German cruisers, STETTIN and FRAUENLOB.

Therefore the situation at this time, even without information of the particulars of the battle events, were rightly estimated by the Commander-in-Chief and the Commander of the Scout- ing Forces as entirely favorable. Thus far principally destroy- ers and only a few light cruisers had been reported, so that an energetic pursuit of same by available light forces seemed to promise success; all the more so because there was reason to hope that the light cruiser, MAINZ, from the East could also engage the destroyers from the westward. To be sure, such a measure could be justified only if the engagement of hostile heavy forces need not be reckoned with at all and also if as- sured of at least numerical equality with the rest of the at- tackers. A further stipulation therefor were visibility con- ditions, which would permit a timely evasion of superior enemy forces. Actually the Fleet Command was in total ignorance that, in contrast to the weather in the river mouths, there was very low visibility at sea, in spots even fog. It is worthy of note that not a single report was requested concerning the visibility at sea, although actions were taking place in the immediate vicinity of Heligoland and it was thought strange that the guns

of Heligoland did not take a hand. Of course such a request would have increased the already over-loaded radio traffic. Not until 11:35 did a dispatch from Heligoland reach the Fleet Command, which designated the weather as "hazy, visibility 4 miles." This was real serious for the light cruisers who were advancing against an opponent not yet known in his full strength. Unfortunately the facts did not conform to the assumptions, which caused the Commander of the Scouting Forces to order S.M.S. MAINZ at 9:20 to attack the destroyer flotillas off Heligoland in the rear. Then the air station at Heligoland was directed by the Fleet Commander to scout with planes to determine and report the composition of the enemy cruisers, if ships, and which ones, were behind these cruisers. The airship, L-3, Lieutenant Commander Fritz commanding, which accidentally was on a cruise, meanwhile had had to return prematurely on account of the hazy weather and bombardment by the enemy, without having been able to get useful information concerning the type of the sighted ships. In her report, however, the airship had given solely technical flight reasons for breaking off her scouting mission.

The orders of the Fleet Command and those of the Commander of the Scouting Forces usher in the second phase of the battle, the German counter-attack.

At 8:55 KOELN and STRASSBURG had received the order to stand out at once in support. In execution of this order, KOELN with the Commander of the Torpedoboats, Rear Admiral Maass, on board passed the Outer Jade lightship at 10:30 in the advance against the foe retiring to the westward, while MAINZ left the Ems a half hour later with the same object.

All cruisers had at their disposal the radio information which had meanwhile come in. From this it was apparent that hostile light forces in considerable number had penetrated the inner German Bight, that STETTIN and FRAUENLOB had at different times been in action with enemy cruisers and destroyers and that

ginning of war the enemy had shown himself with surface forces within our reach. Thus, due to the martial enthusiasm which inspired the whole fleet, the same irresistible pressure which led our army deep into enemy territory prevailed on the cruisers to drive onto the heels of the retiring foe. This thought, supported by the desire to bring aid as swiftly as possible to the torpedoboats of the patrol line concerning whose fate no complete information was on hand, put aside all other considerations. Consequently, in order to lose no time, the cruisers which first left the Jade and Elbe took up the pursuit singly without waiting for those leaving later to join up. Apparently for this reason the Commander of the Torpedoboats on KOELN renounced a simultaneous advance of the cruisers in formation. Heedless even of the changing and unfavorable visibility which was advantageous for surprise, all cruisers steamed singly at maximum speed for the probable point of intercept with the retiring foe.

STRASSBURG from a position in the outer Jade at 10:04 a.m. first of all passed on course west-northwest around square 139 epsilon, in which hostile submarines had been reported. The ship passed without damage through an area which immediately thereafter Torpedoboot Flotilla V erroneously reported as possibly mined. At 11:55 two cruisers, apparently TOWN class, with 10 to 12 destroyers appeared out of the fog 60 degrees on the starboard bow. Four of these at once advanced to the attack and, favored by the low range of visibility of about 9000 meters (9850 yards), fired torpedoes right after coming in sight, so that STRASSBURG had to turn off to port to avoid being hit. At the same time fire was opened on the leading cruiser and both cruisers replied. With the third straddling salvo three heavy brown smoke columns shot up from the stern of the leading enemy cruiser, reaching almost the height of

the mast, the British cruiser turned away on northerly course and followed her destroyers (Chart 27). This short fire action took place at ranges between 9200 and 7450 yards; it had to be discontinued when spotting was no longer possible. However, the Captain of STRASSBURG, Captain Retzmann, had no idea of losing contact with the enemy and turned with left rudder to follow the destroyers. Ten minutes later these were again sighted ahead to port at 8750 yards range. The same performance was repeated a second time: STRASSBURG turns off to starboard to evade the torpedoboat attack which is at once launched, at the same time takes the destroyers under fire between 5900 and 8550 yards range, while the light cruisers, this time stationed beyond the destroyers, can barely be made out. An enemy torpedo is sighted to port paralleling the course of the ship, a second one passes astern; then the destroyers under heavy gunfire rapidly disappeared from sight abaft the beam. During this attack different destroyer classes were clearly recognized; from which it followed that apparently more than one flotilla must have participated in the raid. The Captain now determined to drive the sighted forces toward MAINZ, presumed to be farther to the westward. In this purpose, which perhaps might have resulted in very successful coordination with MAINZ or even the saving of this ship, STRASSBURG was unfortunately hindered because at 12:27 p.m. new forces suddenly appeared to starboard. Further actions tended to draw the ship more and more to the northward. Almost at the same time S.M.S. MAINZ, coming from westward, fell in with ARETHUSA, as she was the one with whom STRASSBURG had fought only a short time previously.

In view of the prior radio messages from Torpedoboot Flotilla I concerning the contact of the patrol line with enemy light forces, MAINZ was ready for sea with steam on all boilers when at about 10 a.m. she received the order to stand out from the Bms. Thus S.M.S. MAINZ could weigh anchor at once and

soon thereafter was underway at maximum speed.

Of the High Seas Forces there was also Torpedoboat Flotilla III in the Ems. Only six of the boats were in Borkum roads at this time, while the other four, amongst which was the flotilla leader, had left at 5:45 a.m. to coal at Emden. At 8:40, in view of the radio reports received, the Commander of Torpedoboat Half-flotilla 6, Lieutenant Commander Theodor Riedel, had ordered the boats anchored in Borkum roads to warm up the turbines and the oil-firing boilers. When MAINZ received the radio order to stand out, the Commander of the Half-flotilla inquired of the Captain of the cruiser if he might follow with the boats but received the order to remain behind as the flotilla was designated to guard the Ems. Two boats, G-169 and G-172, left at once to watch the outer entrances. Further happenings to MAINZ are described by the Executive Officer of the ship, Lieutenant Commander Tholens, as follows:

"The course was first of all northerly so as to cut off as far as possible the retirement of the hostile ships. The airplane placed at the disposal of the ship in Borkum was sent ahead in the same direction. Upon departure from the Ems the sea was calm, little wind, the air clear and the visibility good. The scouting conditions for the airplane seemed to be as favorable as possible. Also possibilities of own retirement after an extended advance seemed to be vouchsafed. However, after a short, but fruitless, flight the airplane had to return.

"MAINZ received the first definite reports concerning the position of the hostile forces from STETTIN and FRAUENLOB and later from STRASSBURG. The reports of S.M.S. STRASSBURG concerning the contact with enemy destroyers and later also light cruisers made participation in the battle appear possible by continuing on northerly course at maximum speed.

At the same time a radio message was also received from -

S.M.S. KOELN, which was endeavoring to reach the same scene of action from south-eastward. From a radio message from S.M.S. STRASSBURG shortly before 12 noon, the sighting of the enemy could pretty nearly be expected about 12:30. This information was given to all hands.

"Meanwhile S.M.S. MAINZ ran into hazy weather. This rendered possible own surprise by superior enemy forces. However, the realization of this fear could now have no influence on present intentions."

The foregoing extract of the report unquestionably shows that on board MAINZ the possibility of a surprise by superior enemy forces was weighed. It was known also that several enemy cruisers were to be reckoned with. The bold, continued advance took place on the full own responsibility of the Captain. However, he was entirely justified as the line of retirement lay open to him. That later a very unfortunate rudder break-down was to bring about the destruction of the ship could not and should not have been weighed in the balance, because otherwise every offensive action at sea would be impossible from the very beginning. Here, for the first time in this war, is plainly shown how the seaman in battle is dependent upon apparently insignificant failure of material, and after the event one should attach no blame for a too intrepid an attack.

The report continues as follows:

"At 12:30 a.m. ARETHUSA and eight destroyers were sighted to northeast⁽¹⁾ on westerly course at about 70 hm (7650 yards); so much had the visibility meanwhile been reduced. So as to take the enemy under fire with the starboard battery, MAINZ turned to port to course north-northwest. Shortly after the first salvos, which the enemy ships returned with guns firing

(1) Only 6 miles to westward of their position at the second action with STRASSBURG and hardly a quarter of an hour after this engagement.

independently, the opponent turned by groups to northerly course. The firing conditions were extremely unfavorable since the enemy ships could just barely be made out in the hazy atmosphere. Nevertheless, several well-laid salvos and certain hits on two destroyers were observed. One of these struck the bridge, putting her, as was later established, out of action with all the personnel including the Captain. S.M.S. MAINZ gradually turned to course north so as not to lose sight of the enemy.

"At 12:45 p.m. heavy smoke clouds were suddenly reported to northwest, and a few minutes later three cruisers of the TOWN class emerged from them. MAINZ at once turned hard to starboard. Even while turning the salvos of the opponent struck in the vicinity and a little later MAINZ received the first hits on the poop and the deck amidships. Meanwhile the fire of ARETHUSA and the destroyers, which were by this time almost out of sight, was without any effect. Our own fire was now directed exclusively at the new opponent. At the same time the latter was reported by radio. However, by 12:55 p.m. the enemy cruisers could only be recognized by the flashing of their guns. Shortly thereafter this also ceased and with it the impacts of enemy projectiles. MAINZ ran at 25 knots, course about south-southwest, toward the East Ems and made heavy smoke.

"Meanwhile another cruiser of the TOWN class (actually it was FEARLESS) was sighted approximately on the port beam and somewhat further forward 6 destroyers in formation and several detached destroyers. During the action which now ensued with these, in which several torpedoes were also fired at MAINZ, the steering gear suddenly jammed at 1 p.m. with 10 degrees right rudder. All efforts to reestablish the maneuverability of the ship were unsuccessful, despite the fact that the whole steering gear was found to be in order. Therefore it was assumed that an underwater hit had bent the whole rudder to starboard. The port engine was stopped; but MAINZ continued to turn slowly to starboard (Chart 24).

"At the same time the report reached the bridge that three guns with their crews were completely out of action. In view of the fact that the ship was unable to maneuver, the three TOWN class cruisers as well as ARETHUSA with eight destroyers were now enabled to reopen the engagement. Thus the ship was faced with a superiority of not less than 5 cruisers and some 20 destroyers. Now the fire was directed exclusively on the destroyers because only against these could results worthy of mention still be expected. Since part of them came real close, a number of hits could also be observed. Meanwhile MAINZ suffered loss upon loss. About 1:20 p.m. the biggest part of the guns with their crews were out of action. The upper deck was a mass of ruins. The ammunition supply almost ceased, and at various times compartments below the armored deck had to be cleared on account of the smoke and gas danger. The starboard engine was making revolutions for only half speed.

"This was the condition of the ship when she received a torpedo hit port side amidships (probably in No. 4 fireroom). This put out of commission all apparatus in the conning tower for the transmission of orders with the exception of voice tubes to central station and the torpedo room. Then the Captain ordered "Sink the ship. All hands man life jackets." He left the conning tower and immediately thereafter was killed, as was also the navigator, Lieutenant Commander Baron Friedrich Karl v. Maltzahn. This order, however, reached only the nearest battle stations and consequently was carried out only partially.

"In consequence of the torpedo hit, the gun fire was interrupted. At this time there remained in the conning tower only the gunnery officer, Lieutenant Commander Otto Niese, and the torpedo officer, Lieutenant Karl Pohle. A little later I myself arrived on the bridge without, however, any knowledge of the last order of the Captain. Consequently upon my order

fire was resumed and at the same time it was attempted to score a torpedo hit. To be sure, there was little prospect for the latter as the ship was now entirely motionless and the enemy cruisers and most of the destroyers either kept astern or stayed out of torpedo range. The torpedoes that were fired, one at a cruiser to port and two at destroyers to starboard, missed. Meanwhile the enemy gun fire, which had ceased during the lull in firing on MAINZ, was resumed with full force. In addition, two enemy battle cruisers now took a hand in the action. Whether they also made hits is not definitely established. According to the statements of several men, a 34 cm (13.5 inch) shell struck the deck amidships without exploding, while giant water columns thrown up by shells falling around the ship obstructed the view. On MAINZ there were at last only two guns still in action. The gun crews were the remainder of all the gunnery personnel of the upper deck; the ammunition was the remainder of all that had been brought up.

"Meanwhile I had been informed of the last order of the Captain. The order "Sink the ship. All hands man life jackets" was thereupon again given. Although the order was now passed over the whole ship from forward to aft, this time again it did not reach the people who were still in the compartments below decks, as was later established. Consequently most of these did not come up until the enemy ceased firing about 10 minutes later. Before doing so, the sea valves in the port engine room and in the torpedo room were opened."

What the upper deck of MAINZ looked like at this time, a gun captain of the ship, boatswain's mate Willi Klein, describes with the following words:

"The picture of the MAINZ is indescribable. Our radio room shot to a heap of ruins was all ablaze; two smoke-stacks hit by shells had toppled over; searchlights were shot to pieces, and more and more shells struck the deck tearing great holes. Gun

crews, talkers and ammunition passers were literally shot to pieces. The upper deck was a wild confusion of ruins, fire, heat and corpses, covered over with green and yellow products of explosion, which produced suffocating gases. Again and again the shells struck the unmaneuverable MAINZ like hail. Not only the 200 to 300 hits in a space of 130 meters (142 yards) length and 14 meters (15 yards) breadth but also the splinters from the ship's sides and decks wrought death and destruction. As long as we continued to defend ourselves, the enemy did not cease to fire. One after the other of our guns were silenced as they were shot to pieces and the gun crews dead. Finally, only No. 5 gun starboard continued to fire, even though slowly, as the gun captain was dead and only one man remained available to serve the gun. Nevertheless it continued to fire until the last shell had been expended. Then the enemy also ceased firing."

The picture offered by the ship below decks after the torpedo hit is supplemented by the following observations of the oldest surviving engineer officer, Johannes Johannsen, whose battle station was with the damage control party. "About 1:15 p.m. torpedo hit. The ship reared up, bent very perceptibly, and rocked for a considerable time. Auxiliary lighting was extinguished. All glasses, which had not already been accounted for by shell impacts, broke. The electric lights became dimmer and finally went out altogether. Flashlights then provided the only illumination. The engines no longer turned over. The leak pendulum now indicated that the ship was slowly sinking forward. All efforts to determine where the leak was were fruitless, since no compartment answered. After a brief lull we heard fire being resumed. Even when the firing and a little while later the impacts of enemy shells ceased, no communication could be had with the other compartments. The conning tower no longer answered. Water which gushed out of

the voice cases now indicated that the water had risen over the armored deck. In other words, the ship at the leaking sections must be down that far."

As soon as fire had been discontinued by both sides, the British ships undertook very energetically the work of rescuing the survivors. Upon call from MAINZ, which up to about 2 p.m. had no list as the port bunker was still full of coal, a destroyer - the LURCHER, the flagship of Commodore Keyes - even came alongside the stern to take the wounded on board. In this wise, with the aid of the men from below decks who had not yet gone overboard, all the wounded whose rescue did not appear to be altogether hopeless were transferred to the destroyer.

At 2:10 p.m. MAINZ, which shortly before had heeled over to port, went down without her colors having been struck. Three hurrahs of the survivors marked the glorious end of her career.

The gunfire of S.M.S. MAINZ's action was distinctly heard by Torpedoboat Flotilla III in the West Ems. Consequently the Flotilla Commander held the boats in readiness directly off the mouth of the Ems, so as to be able to advance at once to attack in case of thickening weather. One of the boats - G-169, Lieutenant Commander Lemelsen commanding - sighted at 1:30 p.m. on several occasions a periscope directly off the entrance buoy and at 2:17 p.m. a torpedo was fired at her. On this occasion the conning tower of the submarine came partially out of the water. The torpedo passed only 15 meters ahead of the torpedoboat, which on her part fired on the opponent without success. The submarine was pursued and searched for by three torpedoboats on zig-zag courses without, however, seeing her again. Soon thereafter, at 2:50, another boat of Torpedoboat Flotilla III, S-165, Lieutenant Commander v. Bothmer commanding, sighted three smoke clouds to north-northwest. She steamed toward them at high speed and at 3:50 p.m. made out in 074 epsilon

about 35 miles outside of Borkum an enemy cruiser with two destroyers running at high speed on course southwest. This was reported by radio. Thus contact with the enemy was established anew; still, this circumstance could not be taken advantage of without cruiser support and without orders from the high command.

For the present the fate of S.M.S. MAINZ remained unknown to the German high command as well as to the German forces then at sea. However, she had been able to report at 1:03 p.m. shortly before her radio was put out of action that she was being chased by enemy armored cruisers. Thereby she had accomplished until shortly before she went down the primary task of the light cruiser which is to contact and report enemy forces. This report first indicated to the high command with all clearness that this was not simply a skirmish on the patrol line but rather that it was a large-scale action supported by heavy ships. Consequently the German battlecruisers, VON der TANN and MOLTKE, immediately received orders to leave Schillig roads in support. At the same time S.M.S. SEYDLITZ, the flagship of the Commander of the Scouting Forces, Rear Admiral Hipper in Wilhelmshaven roads weighed anchor, and BLUECHER received orders to follow.

The report of the appearance of enemy armored cruisers also occasioned the Commander of Submarine Flotilla I, Commander Hermann Bauer, to take a hand. Until now he at Wilhelmshaven had rightly kept aloof and permitted the man on the spot, the Commander of Submarine Flotilla II, Commander Otto Feldmann on STETTIN as the senior submarine commander present, to take appropriate steps. However, with the first report of the appearance of hostile armored cruisers he believed that he should no longer refrain from pointing out by radio despatch the necessity of attacking these worthy objectives with a full employment of submarines. Still it was already too late to so

utilize the submarines effectively. The boats upon their first departure should have undertaken at once the advance to the westward, instead of taking up the purely defensive positions between Heligoland and Weser lightship (see chart 19). The latter, however, did not conform to the then general conception that the enemy in an attack on the German Bight would advance with his heavy forces to a position just off the river mouths so as to overwhelm our ships while standing out.

When STETTIN at 2 p.m. sighted battle cruisers of the LION class and retired before them toward Heligoland, the plan to attack them with submarines had to be abandoned because the distance from Heligoland to the position of the battle cruisers was about 35 miles - a distance which it would take the submarines about four hours to cover, counting the time incidental to the transmission of orders and departure. On this question the Commander of Submarine Flotilla II expresses himself in detail as follows:

"As the enemy ships were retiring on southwest course, I assumed that they were endeavoring to get out of reach of night attacks by our torpedoboats. Thus the participation of the submarines offered no prospects and consequently was not ordered.

"In addition the question arises whether or not to permit the submarines to advance to the westward and leave them at sea over-night. As the possibility exists that the opponent will again advance against the inner German Bight on the following morning, I desisted from this course as well, so as not to denude the inner German Bight of submarines for this eventuality."

From the last sentence it is evident that the conviction had not yet found general acceptance that the inner German Bight offered no prospects for submarine attacks on British heavy forces, that rather one must seek them much farther out.

Moreover, it should be mentioned, as had meanwhile been established, that the British submarines at that time could dive more quickly than the German. Due to their rapid diving the former were better suited to the low visibility conditions of 28 August, 1914. According to the statement of the Commander of Submarine Half-flotilla 2, the visibility subsequent to about 10:40 a.m. was so bad that surface cruising of the German submarines was almost synonymous to sacrificing them. With their long diving interval it might easily have come to pass that enemy ships approaching at high speed would shoot down surfaced boats. To submerge unobserved in the presence of hostile craft seemed in any case precluded; an opportunity to fire upon a cruiser or destroyer running past at high speed seemed questionable, even if such a ship had not previously seen the submarine dive. Yet, in conclusion, it must be said that in view of the importance of the attack objectives the retention of the German submarines in Heligoland harbor meant a lost opportunity. Aside from the above-mentioned reasons, a contributory circumstance was doubtless also the fact that the Flotilla Commander was attached to a cruiser which was not exclusively in the service of the submarines, but which, due to the small number of available ships, had to accept action repeatedly to ward off hostile forces.

At 11:25 a.m. ARIADNE had also received orders from Commander of the Scouting Forces to advance in support, if possible, from her patrol position in the outer Jade.

Due to the orders which had followed in rapid succession, the consequent movements and the further position reports which had come in, the situation at 1:00 was as follows:

STRASSBURG, farthest out, reports that she is engaged in another action with cruisers and destroyers to southward of her in 117 epsilon about 30 miles west of Heligoland, while KOELN in an adjacent square to southward of STRASSBURG is likewise in action with destroyers. It could therefore be

assumed that both ships were fighting the same forces. About 20 miles farther back, in 135 epsilon, is ARIADNE and she informs KOELN that she is coming to her assistance, while STRALSUND in the same square advances to the westward. Others coming up to support are STETTIN in 151 epsilon, KOLBERG in 138 epsilon and DANZIG in 139 epsilon, all on westerly courses (See Charts 5 and 19).

At this time we will turn again to the actions of the individual cruisers. Of these STRALSUND has passed out of the Wilhelmshaven lock at about 11 a.m. and while passing SEYDLITZ received the following order by searchlight: "Stand out at once in support of KOELN!" Immediately thereafter information came in from KOELN that 132 epsilon and 133 epsilon were suspected of being mined. As previously stated, this was an error based on an incorrect transmission of the square designations in a corresponding radio despatch from STETTIN concerning the alleged mining of the squares to the Northward of Heligoland. Consequently some of the cruisers standing out felt compelled to take a circuitous route around the stated squares. The resultant delay was a contributory reason which prevented a timely junction of the cruisers before encountering the enemy.

Upon the report of the first action of STRASSBURG in 122 epsilon, the Captain of STRALSUND, Captain Harder, after passing the Outer-Jade lightship, had set course thence. Almost directly off the mouth of the Jade a hostile, submerged submarine was sighted and taken under fire, apparently, however, without result. During the further approach attempts were made to establish communication with KOELN. These were unsuccessful, as the latter failed to answer after numerous radio calls, and it was assumed that the radio installation of the ship was out of commission. On the other hand, the continuous radio reports of STRASSBURG gave her sufficient essential information, in order to attempt to bring the destroyers reported by her

between that and own ship. Unfortunately it was neglected to permit the STETTIN, which at this time was to starboard, to close up for a combined advance, even though she was a slower ship. Thus STRALSUND soon thereafter found herself also facing a superiority alone in 128 epsilon. At first gunfire was heard 2 points on the starboard bow, which seemed to draw slowly to port. Then the gun-flashes were seen and soon thereafter despite the hazy weather three enemy cruisers, apparently TOWN class, were made out. The latter were steaming in column and seemed to be engaging an opponent, who could not yet be made out, on the side away from STRALSUND. To take a hand in the action, STRALSUND turned at once to east-northeast (see chart 25) and opened fire at about 7200 m. (7850 yards), angle of train 280° , on the leading cruisers, which was returned by these immediately. However, the visibility at this time was so unfavorable that the fall-of-shot could not be observed from the crow's nest. With one of the first enemy salvos, a wire of the large radio aerial is severed, while another shell penetrates the ship's side over the sheer strake without, however, bursting, so that no water enters and no other damage is caused thereby. Further hits are luckily avoided with quick changes of course. Then, however, the enemy ships are apparently released by the unknown opponent to westward, for the former now concentrate the fire of the three cruisers exclusively on STRALSUND. The latter is therefore forced to withdraw from this superiority and turns away, oddly enough without being pursued by the enemy.

Practically at the same time in the immediate vicinity, three other actions developed within a radius of only 8 miles and yet wholly separated from each other. Two of these in which the German cruisers, ARIADNE and KOELN, participated were to end fatally.

While the fate of KOELN remained almost completely shrouded in mystery until after the publication of the British report, the experiences of ARIADNE may be followed in detail in the battle report of her Commanding Officer, Captain Seebohm.

On the morning of 28 August, S.M.S. ARIADNE as the flagship of the harbor flotilla of the Jade and Weser was stationed in the outer Jade. When gunfire was heard to the southward of Heligoland and the radio message from STETTIN: "Request cruiser assistance" was received, she made one advance during the forenoon. However, she again turned back when the gunfire ceased and when according to the incoming radio reports the enemy was apparently retiring to the westward. ARIADNE had just returned to the mouth of the Jade when she was met by S.M.S. KOELN, standing out at high speed to the westward. Shortly thereafter she received the order: ARIADNE and NIOBE, if possible, advance to support. NIOBE was coaling at Wilhelmshaven, so that ARIADNE alone followed KOELN, but the latter due to her superior speed soon vanished in the fog. Concerning the further events, the Captain of ARIADNE, Captain Seebohm, reports as follows:

"Radio messages were then received from MAINZ and STRASSBURG that these ships were engaged with enemy destroyers. After avoiding a square reported as being possibly mined, course was laid for the above-mentioned ships. According to her radio reports, KOELN appeared to be following the same course.

"About 1 p.m. there was sighted on the port beam an enemy submarine which dived at once and attempted to make an approach on ARIADNE, but then she disappeared so that firing did not take place.

"Soon thereafter gunfire was heard ahead to port and course was laid toward it. Shortly before 2 o'clock two ships

appeared out of the fog, of which the one right ahead did not reply to our recognition signal. She was made out to be an armored cruiser and I immediately turned to the reverse course (See chart 26).

"The second ship was KOELN,⁽¹⁾ standing further to the northward of the opponent and being pursued by him. Doubtless she was saved only by reason of the participation of ARIADNE. The enemy at once shifted his fire from KOELN to ARIADNE.

"Shortly ARIADNE received a hit in the forward boiler-room, which caused a bunker fire. and the boiler-room had to be abandoned on account of the smoke hazard. Thereby five boilers were lost, and the speed of ARIADNE was reduced to 15 knots.

"The opponent, according to her silhouette, was LION. A second British battlecruiser of the same class soon appeared behind her and participated in the action. They fired upon ARIADNE about a half hour at ranges from 5500 m. (6000 yards) to 4000 m. (4350 yards) and 3000 m. (3300 yards). The latter ranges are only estimated, as all range-finders were out of commission.

"ARIADNE received many hits from heavy guns, amongst others a number of hits in the after part, which became completely enveloped in flames. Those who were stationed there and were saved can attribute such escape only to luck. The ship also received a number of heavy hits forward, of which one penetrated the armored deck and put the torpedo room out of action, another destroyed the dressing station with all personnel present.

(1) In the original report STETTIN is mentioned rather than KOELN. At that time the Captain of ARIADNE actually believed that STETTIN was the ship ahead of him. Also the assumption expressed in the report that KOELN was saved due to the participation of ARIADNE does not conform to the facts, as the former was nevertheless overtaken by her fate soon thereafter.

"Oddly enough amidships and on the bridge, the ship received practically no hits.

"How many hits all told struck the ship is beyond all estimation. Many apparently tore the rigging and then exploded. Again it was observed that other shells did not explode upon impact with the water. Many shots fell to the right and left, as ARIADNE was running away from the opponent and offered only a small target. The firing of the British was by salvo with fairly large intervals.

"The effect of the shells was chiefly that due to fire. All living compartments forward and aft were at once set in flames. To extinguish the fires as they started was impossible on account of the strong fire action; in addition, the fire-fighting installation above the armored deck had been destroyed throughout.

"Suddenly about 2:30 p.m. the enemy turned away to the westward. I assume that he could no longer make out ARIADNE in the fog, as she was enveloped in smoke due to the fire aft.

"Until that time fire had been maintained with the guns remaining in action on ARIADNE; finally, it was independently controlled by the gun captains as all battle order communication had failed. Due to the dense smoke on the ship, observations could no longer be made from the conning tower.

"Despite the destruction of the opponent, the crew worked with greatest composure as at drill. The wounded were cared for by the stretcher-bearers. All stations independently endeavored to effect repairs as far as possible. The Executive Officer, Commander Wilhelm Franck, with the repair gang was swept away by a hit in the between-decks.

"After the enemy turned away, I first of all directed all hands to extinguish the fires. However, this proved to be impossible. The after part of the ship could no longer be entered and the forward part soon had to be cleared likewise.

Upon the order to flood magazines, men made their way up to the forward one. It was found that it was already flooded; wherefrom, has not been explained.

"It was impossible for men to make their way to the after magazine. Previously an attempt had been made to open the armored hatch to sections I and II, in which men still remained, but this proved to be impossible as the hatch had been bent by a shell hit.

"The engine and the after boiler room remained completely intact during the whole action, likewise the steering gear.

"Staying on the ship became more and more unbearable due to the heat and smoke, and because the ready ammunition still remaining at the guns began to explode. However, these explosions did not seem to do much damage. Many small splinters were scattered around, which, for example, penetrated the bridge deck from below.

"The crew with entire composure gathered on the fore-castle, to which place the wounded were brought also. I called for three hurrahs for His Majesty the Emperor, following which the flag song and "Deutschland, Deutschland uber alles" were sung. Even the wounded joined in. One man called for three hurrahs for the Captain. Shortly before 3 p.m. DANZIG approached and sent over boats.

"Also the two cutters of ARIADNE could be put in the water, as the ship amidships, as previously stated, had not suffered so severely.

"The wounded were first of all put in the boats - they were lowered away from the fore-castle with lines. As it gradually became impossible to remain any longer on the fore-castle, the remainder of the crew upon orders jumped overboard. Some of the swimmers swam over to DANZIG and STRALSUND, which likewise had come up. The others clung to lifejackets and hammocks and were picked up by the boats.

"Meanwhile the fire in the burnt-out ship had died down; also the explosions became less frequent.

"I therefore went over to STRALSUND with some men, who then went back on board again in an ARIADNE boat, in order to request the Captain of STRALSUND to take ARIADNE in tow. However, ARIADNE at this time suddenly heeled over sharply and at 4:25 p.m. capsized with flying colors. For some time the keel remained visible above the surface of the water. (See Charts 19, 25 and 26).

"Warned by the impacts of heavy shells in the vicinity of ARIADNE, STETTIN was enabled to withdraw in time by promptly turning away from the destructive fire of the heavy guns of the enemy battlecruisers."

Previous to this time STETTIN had been engaged in transmitting orders to the submarines to the southward of Heligoland. When her radio was again in commission about 12 noon and the incoming radio despatches were again being intercepted, new decisions were made. Successive signals giving course and position of MAINZ, KOELN, STRASSBURG and STRALSUND indicated that all of these ships were heading approximately toward the same point. Now STETTIN also steered for it with maximum speed. Thus this cruiser soon thereafter came to be a witness and participant in the action of ARIADNE, concerning which the Captain of STETTIN reports as follows:

"At 1:40 p.m. S.M.S. ARIADNE was sighted ahead - although at first she was taken to be a British minelayer. The exchange of recognition signals was not effected until after some time when for a spell the visibility became a little better. The visibility was very unsettled at this time.

"At 1:45 gunfire was heard ahead. About 1:55 we gained the impression that it was that of heavy guns. At 1:56 big muzzle flashes were observed and thereupon I turned to starboard to the reverse course. While turning, heavy impacts

were observed near ARIADNE, which was also turning. Soon thereafter ARIADNE received the first hits.

"While S.M.S. STETTIN was turning, the opponent was recognized as being ships of the latest battlecruiser type.

"At 2:05 the leading battlecruiser opened fire on STETTIN also, to which I did not reply on account of the unfavorable firing position relative to the enemy and so as not to facilitate his holding his point-of-aim due to muzzle flashes.

"The shots of the opponent fell fairly close to the ship (within 500 m.) on both sides, long and short but predominantly long. For the present the visibility did not permit the enemy to make observations. He ceased firing after about 10 shots, but then after a few minutes resumed firing for a short time.

"At 2:20 S.M.S. DANZIG was sighted on the starboard beam to southward on westerly course. When she was informed by searchlight that STETTIN was being chased by enemy battlecruisers, she likewise turned to course east. Simultaneously, it appeared that the opponent had abandoned the pursuit.

"Fires were observed on the stern of ARIADNE - she was still following with fairly high speed. Later, when the gunfire silenced to westward, DANZIG, which was on the starboard quarter of STETTIN, reversed course to render aid to ARIADNE. To restore communication with the submarine flotilla, STETTIN headed for Heligoland.

"No losses or damage were suffered due to the fire of the battlecruisers."

Concerning the activities of S.M.S. KOELN - flagship of the Commander of Torpedoboats, Rear Admiral Maass, Captain Meidinger commanding, Lieutenant Commander Guggenberger staff officer - all official reports are lacking. About 1 p.m. KOELN made her last position report - at this time the ship was 16.5 mi. north-northwest of Norderney lightship on northerly course. At 1:30 her last radio despatch without position designation

suddenly breaks off. Only one single survivor of KOELN, fireman Neumann, was saved. His testimony, which will be mentioned later in the discussion of the rescue of survivors, naturally can have no bearing on the conduct of the ship since Neumann, being a fireman, did not arrive on deck until the ship was in a sinking condition. Nevertheless, from available information together with the other happenings, it has been possible to show almost definitely what courses KOELN must have steered and what conclusions are to be drawn therefrom as to her battle action.

KOELN steamed out of the Jade at full speed and follows on the same course as STRASSBURG but without having the latter in sight due to the hazy weather. When STRASSBURG got into the first action with destroyers at 11:55 a.m. and turned in a circle, the distance between STRASSBURG and KOELN manifestly decreased. The gunfire was heard more and more distinctly by KOELN. Then the firing on STRASSBURG was discontinued for 10 minutes and thereafter was again heard by KOELN. At this time KOELN was only 7 miles astern of STRASSBURG and from the reports of S.M.S. MAINZ she knew that the latter was about in the same latitude 20 miles to the westward. Thus there were offered prospects of a total annihilation of the opponent enveloped by the three German cruisers. Probably the same thought prevailed on KOELN as on MAINZ - at this time the Captain of the latter informed all hands that in a half hour they would be engaged with the enemy. KOELN now followed STRASSBURG until 12:30. From time to time gunfire must have been heard ahead, as STRASSBURG was in repeated actions with destroyers. Since the course of STRASSBURG was not straight due to avoiding torpedoes, KOELN at 12:50 was not more than 5 or 6 miles behind the former. At this time MAINZ, which had been in action with destroyers for 15 minutes, sighted hostile cruisers. This radio despatch from MAINZ was received by KOELN because the

latter relayed it to the Commander of the Scouting Forces. At this time KOELN must have made a change of course of about 8 points to west-southwest, otherwise it would have been impossible for her to reach at 1:30 p.m. the place where Beatty later sighted her. Aside from the radio despatch, this change of course may be explained quite simply. The heavy gunfire of MAINZ, at this time 9 miles away, must have been heard on the port beam; furthermore, the British destroyers and ARETHUSA, upon whom MAINZ was firing, were between KOELN and MAINZ, and ARETHUSA was firing with 15 c.m. (5.9 in.) guns. Thus if KOELN wished to engage there, and for a Commander of Torpedo-boats that was something to be taken for granted, he had to make this change of course. About 20 minutes after KOELN turned to the new course, during which she heard continual gunfire right ahead and drawing closer, she sighted on the port side forward ARETHUSA with the retiring torpedoboats. (Statement of ARETHUSA). At this time the speed of ARETHUSA had already been seriously reduced, and thus it is to be supposed that KOELN sought to block the escape of the retiring boats to the westward, particularly since their respective courses were very favorable for doing so. Therefore KOELN made a small change of course in order to relieve the pressure on MAINZ and to envelop the retiring destroyers, which were now in sight. (Charts 19 and 28). At 1:30 KOELN reported by radio that she was in battle with these. As previously mentioned this radio despatch was suddenly broken off. The position report was lacking - This was the last news of KOELN. Her eventual fate was first made known through the British report, which will be referred to later.

Due to actions with light forces to eastward and northward of her, STRASSBURG had meanwhile been drawn farther and farther to the northward and westward. Then, however, shaking off her opponents temporarily, she ran to the southward toward

the audible gunfire, so that at the beginning of the ARIADNE action she stood only about 5 miles to westward of her. Meanwhile her very short actions are enacted again and again in the same way. The British destroyers usually stand in to attack immediately after sight contact and are always successfully out-maneuvered by STRASSBURG by slowly turning away and by keeping them under fire as long as the range and the low visibility permit her to make out the target and to observe the fall-of-shot. As a rule, the enemy forces are lost sight of very soon in so doing. Under these conditions own fire action made high demands on training due to the necessity of quickly picking up, continually shifting points-of-aim. Despite large ammunition expenditure the fire effect of the enemy guns was slight. The enemy shells, which despite the short range had a noticeably high angle of fall, usually did not detonate. The ship was hit only once and then by a 15 cm (5.9 inch) shell. It penetrated well aft, abaft the armor belt, striking obliquely from forward the bulkhead between sections I and II above the armored deck. The only effect was that two large store-rooms filled with water. Apparently this projectile hit sideways and did not explode, because neither the shell, nor parts of same, could be found. Also no bursting effect could be determined.

Up to 1 p.m. no fewer than three destroyer attacks were successfully warded off. The first of these began about 12:27 when a Scout (1) and a number of destroyers were sighted to starboard. The action lasted 10 minutes and was continued again at 12:48, perhaps with the same destroyers (see chart 27). Another attack followed at 1:04 - this time supported by two enemy cruisers. In this phase and with the third salvo a hit was made amidships on one of the approaching destroyers with a

(1) A particular British type of a lightly armed and very fast light cruiser, primarily used as a leader of destroyer flotillas.

resultant white cloud of steam. At this time gunfire was distinctly audible to southward or southwestward of STRASSBURG, while a radio report from MAINZ confirmed the supposition that the ship was to be found in that direction. The Captain of STRASSBURG therefore transmitted the radio report: "Position 117 epsilon. Course west. Enemy to southward," and went in pursuit of the destroyers, which were drawing to the southwestward. He intended to press the latter on KOELN and MAINZ, which were presumed to be closing from the southeastward and southwestward respectively, and at the same time to join up with these cruisers. Thus it came about that the destroyers made another unsuccessful attack on STRASSBURG, and finally one thereafter at 1:40 - this time by two groups simultaneously, one making an approach and the other passing. At this time gunfire was heard anew in a southeasterly direction, which according to a radio report received at 1:30 from KOELN: "Position 105 epsilon, am in action with destroyers" could come only from that vessel. Apparently heavy guns were also firing. Thereupon STRASSBURG advanced in this direction and giving her own course and position she called MAINZ by radio twice without, however, receiving any answer. At 1:38 KOELN also no longer answers on her call. The last important signal of MAINZ concerning the appearance of hostile armored cruisers was not known on STRASSBURG at this time. Thus the danger of his own position is not fully realized by the Captain until an enemy battlecruiser, on which numerous destroyers are gathering, is suddenly sighted ahead at 2 p.m. Captain Retzmann at once turned away to a northerly course without becoming engaged. Due to the superiority of the opponent - which STRASSBURG took to be a ship of the SHANNON type with four 23.4 cm (9.2 inch) and ten 19 cm (7.5 inch) guns - the outcome of such an action could not be a matter of doubt. However, the northerly course also develops unexpected dangers

because eight minutes later forces are again sighted, in all probability those previously sighted in this area. For a short time two TOWN class cruisers are made out abaft the port beam at 8000 m. (8750 yards) range. By a change of course of one point to starboard, STRASSBURG was able to avoid them in time without engaging and after a quarter of an hour they disappeared.

After having sighted strong forces to the southward, the attempt to join up with the other cruisers in this direction now had to be abandoned. Furthermore, junction could only be effected by hauling out in a wide arc to northward and eastward. Scarcely had this movement commenced when a new surprise developed. At 2:30 p.m., in 104 epsilon right center, four battlecruisers of the LION class in column on opposite course suddenly appeared four points on the starboard bow. The range was only 8000 m. (8750 yards) (Charts 19 and 27). The ship could now be saved only if it were possible in the hazy weather to mislead the opponent into thinking that STRASSBURG was a British ship. In order that they might entertain this assumption as long as possible, Captain Rötzmann at first maintained his course because any sudden change of course would arouse suspicion at once. Quite likely, too, such a move would bring the ship within range of the TOWN class cruisers which had just been lost sight of. Very slowly she was turned one point to port; nevertheless, the battlecruisers were passed abeam at only 7500 m. (8200 yards). The deception succeeds; yet, after passing, the enemy flagship makes a searchlight signal to STRASSBURG, which is not answered. Apparently they were the letters U.A.R., the challenge, similar to those that had been observed on different occasions. At 2:42 the enemy battlecruiser dropped out of sight.

Thus for 12 minutes the ship was in direct contact with the enemy superiority, and every minute of this time might bring

an end to the deception. Then the fate of STRASSBURG would have been the same as MAINZ or KOELN; the ship and crew were saved from this desperate situation solely through the collected and determined leadership of her Captain.

With the sighting of the battlecruisers, the fundamental idea of the hostile undertaking was revealed. After breaking through the German patrol line, the British light forces were to draw our cruisers onto outlying submarines and strong cruiser squadrons. Other submarines stationed off the river mouths were to hinder the German heavy forces in standing out or to inflict losses on same before the latter could on their part bring the British cruiser squadrons to battle. The British plan was considerably favored by the low visibility prevailing on this day. This had made it impossible for the German patrol forces to obtain a clear and timely picture of the strength and intentions of the opponent. Thus the enemy was enabled to always meet the individual German cruisers with superiority.

Even though MAINZ at 1:00 p.m., STRASSBURG at 2 a.m. and STETTIN at 2:10 p.m. had reported large and armored cruisers, this was unfortunately made in such indefinite form that the High Command remained in doubt as to number, class, and organization of the sighted forces. The situation was not completely clarified until STRASSBURG at 2:25 definitely stamped their character in the following report: "117 epsilon, Battle Cruiser Squadron I, Course southwest."

At 2:25 p.m. the Fleet Commander had directed that Squadrons I and III expedite raising steam. Almost simultaneously with the last report the order was at last issued to recall the light cruisers and to keep all torpedoboat flotillas ready to stand out at dusk. After the presence of British Battle Cruiser Squadron I was definitely reported, the Commander of the Scouting Forces received the order: "Battle cruisers are not to engage the battlecruiser squadron." It was now obvious

that they, too, would be opposed to a superiority until the German battleship squadrons could take a hand. The Commander of the Scouting Forces then supplemented these directions, in that he directed the light cruisers to fall back on SEYDLITZ.

In view of the course of events, one must ask why this order was not issued sooner. Until the report of the appearance of hostile armored cruisers, the Fleet Commander actually assumed that our light cruisers had a superiority. According to the reports received up to 1 p.m., he believed that it was only an attack of two - at most, four- light cruisers and about two destroyer flotillas, which, moreover, had already been warded off. Not until after the radio despatches subsequent to 1 o'clock proved this conception to be in error did the Fleet Commander with the recall interfere with the measures of the Commander of the Scouting Forces. In this connection, in the war log of the latter is the remark that he had contemplated a similar order but had not issued same because the light cruisers were to retire, as soon as armored cruisers were reported, in accordance with their general tactical training and the provisions of naval instructions for the cruiser service. This doubtless is the case; yet it should be remembered that on the light cruisers periodically involved in sharp, close actions the reception of radio messages and the delivery of same to the conning tower could not proceed without friction, mistakes and casualties, in contrast to the quiet conditions on the distant flagships. Consequently, on the latter they could oversee the general situation more clearly and free from momentary impressions. A timely order, which should not go beyond the form of a general direction, would doubtless have provided succor for the ships in action and relief for the Commanding Officers in their responsibility, especially because it must be difficult for the latter, in view of the battle of their comrades against an enemy superiority, to retire.

The order was received by the ships, insofar as they were still able, while already retiring or at the scene of disaster of ARIADNE. It strengthened the Captain of STRASSBURG in his decision to leave the matter of contacting KOELN, MAINZ and STRALSUND to chance and instead to endeavor as quickly as possible on easterly, and later on southerly, courses to join up with the large cruisers. The position and battle reports which STRASSBURG had regularly made were answered by the above-mentioned light cruisers only seldom after 1 p.m. and not at all after 2 p.m. Thus she no longer had any definite information available to determine their positions.

Meanwhile DANZIG as well as STRALSUND had arrived in the vicinity of the burning ARIADNE. S.M.S. DANZIG, Captain Reiss commanding, later as Captain of WIESBADEN he was killed in the battle of Jutland, at 12:25 had received orders together with MUENCHEN to stand out at once and join up with STRASSBURG. In the advance to westward in execution of this order, DANZIG at 2:09 p.m. arrived in the vicinity of the scene of action of ARIADNE. At this time the fire of heavy guns was heard, a few impacts were also seen, so that DANZIG at once turned to the support of own endangered forces on course northwest by west. On this course she sighted soon thereafter STETTIN steaming away at high speed on northeasterly course and behind her ARIADNE. DANZIG turned at once to parallel the course of STETTIN and received information from her by visual concerning the battle situation. When she received the radio despatch from STRALSUND at 2:20: "122 epsilon left center, am in action with three enemy cruisers," DANZIG turned at once to south-southwest to join up with that ship. Apparently good service could still be rendered there, while enemy armored cruisers seemed to prevent a further advance to the northward. This decision became untenable, when shortly thereafter the flag signal was seen on ARIADNE: "Urgently need assistance!" Just

then this ship was burning aft and forward and appeared to be out of control. The Captain of DANZIG therefore decided to render assistance to the ship despite the hostile armored cruisers. He approached as close as possible and undertook the rescue of the crew of ARIADNE with both cutters in the water. Naturally the recall which was received shortly thereafter did not cause him to abandon the work of rescue. However, to receive the support of own forces, DANZIG radioed at 2:50: "Rescuing ARIADNE personnel," along with the designation of her position. Yet, due to the noise of steam blowing off and due to the explosions in rapid succession on ARIADNE only 50 to 100 meters away, the transmission of this radio message was attended with considerable difficulty.

While this was transpiring, STRALSUND after breaking off her action had retired about 5 miles in an easterly direction, when she sighted KOLBERG and right afterwards again heard gunfire. Turning toward KOLBERG, she sighted DANZIG and ARIADNE a few minutes later. She then participated in the work of rescue (see charts 19 and 26).

S.M.S. KOLBERG, Captain Widenmann commanding, upon her departure had also sought to join up with STRASSBURG. However, at the beginning of the STRASSBURG actions she was still far behind as the ship could not make more than 22 knots and was steering a zig-zag course on account of submarine danger. At 2:05 p.m. gunfire was heard on the port bow; the cause of which was soon explained by the radio despatch of STRALSUND: "At in action with 3 light cruisers of the TOWN class, course east." When STRALSUND herself came in sight at 2:30, KOLBERG also turned to course east, since a further advance to the westward appeared inadvisable on account of the armored cruisers which had meanwhile been reported by STRASSBURG and STETTIN. Still her intention of joining up with STRASSBURG had not yet been abandoned; moreover she turned to north-northeast so that she

might contact her by going far back on this course. Then KOLBERG sighted ARIADNE with the other ships which sufficed for the work of rescue, so that her Captain decided to advance to the northwestward in order to provide for the security of the rescue work by scouting for the enemy. This seemed all the more necessary, when an enemy armored cruiser squadron was reported only 14 miles away. Even though KOLBERG in this course of action did not conform literally to the recall order of the Commander of the Scouting Forces and she ran the risk of being likewise destroyed, nevertheless the employment of the cruiser for the purpose of security against the enemy was correct and unavoidable. The Commander of the Scouting Forces was informed of the situation by radio. At 3:45 p.m. STRASSBURG appeared from the northward and reported that the four enemy battle-cruisers were last sighted in 117 epsilon. Soon thereafter own battlecruisers, VON der TANN, MOLTKE and SEYDLITZ were sighted (charts 19 and 27).

VON der TANN and MOLTKE, under the command of the third-in-command of the Scouting Forces, Rear Admiral Tappen, went out first and passed the Outer Jade lightship at 3 p.m., about two hours after the first report of the appearance of enemy armored cruisers. SEYDLITZ with the Commander of the Scouting Forces on board still remained behind due to condenser trouble and BLUECHER first had to pass through the harbor locks. In addition MUNCHEN had received orders at 2:06 p.m. to scout in the direction of Amrum, so as to guard against forces breaking into the German Bight at the same time from the northward. Likewise, HELA was left on her station.

Rear Admiral Tappen was face to face with a difficult task because no report whatsoever had been received from MAINZ or KOELN for about two hours, so that their positions could not even be approximated. When therefore the report of STETTIN: "ARIADNE heavily damaged in 121 epsilon" was received, he forthwith de-

cided to head first of all for this square in order to afford protection to the ships there, especially since a report of STRASSBURG at 2:31 dispelled any doubt that these really needed support. Meanwhile an order of Rear Admiral Hipper had limited the freedom of movement of the battlecruisers standing out, so that they were not to advance farther than 126 epsilon before his arrival with SEYDLITZ. He did not want the battlecruisers also to run into the enemy in detached groups, rather that these at least be engaged in formation.

Steaming at 25 knots and escorted by Torpedoboat Flotilla VIII, they arrived at the scene of disaster of ARIADNE at about 3:25. Upon arrival, the third-in-command of the Scouting Forces at once despatched Torpedoboat Half-flotilla 16 in a westerly direction to complete the service of security already undertaken by KOLBERG. After a boiler explosion ARIADNE capsized at 4:25 p.m. and sank in Lat. 54° 6' N., Long. 7° 14' 5 E., after all survivors of her crew had been rescued.

At 4:10 p.m. Rear Admiral Hipper with his flagship, S.M.S. SEYDLITZ had also appeared at the scene of disaster and then conducted a short advance of the battlecruisers in north-northwesterly direction. KOLBERG, STRALSUND and STRASSBURG as well as Torpedoboat Flotilla VIII formed a screen, while the heavy ships, formed in an open line with 800 meters interval, followed at 15 knots (see chart 19). At the same time Torpedoboat Flotilla III stationed at the Ems was directed to hold itself in readiness for night operations.

The aim of the advance of the Commander of the Scouting Forces could only be a limited one because the Fleet Commander had directed not to engage the battlecruisers. Furthermore, the prospects were very small, even for making contact with the enemy for the purpose of delivering night torpedo attacks. The purpose of the advance was therefore exclusively, so far as the visibility permitted, an attempt to support KOELN and MAINZ or at least to determine their whereabouts. No answer was received

upon repeated radio calls and even inquiries to the other cruisers proved fruitless. At the northern end of the advance the battlecruisers missed the place where KOELN went down by only 8 miles - one of the light cruisers in fact approached to 4 miles of this spot. Solely due to this regrettable circumstance, the survivors of KOELN, still drifting around in the water at this time, were not found and rescued. At any rate, in view of the general situation it was considered hardly possible that survivors would still be found in this area, especially since one could surely assume that the British ships had already done everything in their power to rescue and take prisoners since no further actions hindered the enemy in so doing. Thus it is to be explained why neither light forces and torpedoboats were left behind for an extended search of the scene of action nor hospital ships called out to stand by. Moreover, at 5 p.m., when BLUECHER joined up with the other cruisers, the fruitless advance was broken off so as to enter the Jade before dark. The ships were not to be unnecessarily exposed to the danger of surface submarine attacks at night and the bar in the outer Jade was to be passed in time before low water.

The watch of the German Bight was reestablished and the patrol positions for the night were occupied according to plan. Torpedoboat Flotilla VIII took station on the outer line and the patrol boats on the inner line, while the cruisers, KOLBERG, HELA and MUENCHEN were assigned to support these forces. Previously aircraft had received orders to scout and found that there were no enemy ships, with the exception of submarines, within 100 miles to northwestward of Heligoland. Consequently the Fleet Commander abandoned his intention of attacking the retiring foe with torpedoboat flotillas during the night. Thus the forces which had been principally engaged in the day battle put into port and at 9:25 p.m. SEYDLITZ anchored in the Wilhelms-haven roads. Rear Admiral Hipper reported to the Fleet Commander

and verbally gave him an account of the happenings.

* * * *

When night fell. nothing was known concerning the fate of MAINZ and KOELN. The British report was required to complete the picture of the operations. The following was brought out:

They were not TOWN class cruisers, as STRASSBURG had reported at first, but again ARETHUSA, FEARLESS and Destroyer Flotilla I, which STRASSBURG engaged in the pursuit at 11:55 am.

According to the report of Commodore Tyrwhitt, ARETHUSA had meanwhile filled up her ready ammunition supply and all guns with the exception of two 10.2 cm (4.0 inch) were ready for action. Nevertheless, under the fire of STRASSBURG - that is, just a single German cruiser - the situation soon became so critical that only the immediate attack of the destroyers and the energetic support of FEARLESS saved the imperilled British flagship from more severe damage and perhaps even capture by the enemy. This is expressly emphasized in the report of Commodore Tyrwhitt. Concerning the German fire effect he expresses himself as follows: "We received a very severe and almost accurate fire from this cruiser; salvo after salvo was falling between 10 and 30 yards short, but not a single shell struck; two torpedoes were also fired at us, being well directed, but short." Aside from the fact that STRASSBURG fired no torpedoes whatsoever, this statement is also otherwise contestable. If in fact no German shells hit, contrary to the observations of STRASSBURG, it remains a mystery why, as is expressly emphasized, the situation had become critical. In any case, however, the further statement is inadmissible that STRASSBURG was badly damaged by the 15 cm (5.9 inch) battery of ARETHUSA and the so-called splendidly directed fire from FEARLESS. As previously mentioned, STRASSBURG received all told only one hit in her numerous actions on 28 August and that one was a 15 cm (5.9 inch) shell which did not burst.

The British report is also in error that STRASSBURG retired toward Heligoland; moreover, she was prevented from renewing the battle with ARETHUSA solely on account of other British forces which appeared from the eastward.

What forces STRASSBURG engaged in her other actions is not apparent from the British report. However, one cannot go wrong in assuming that they were the detached light cruisers of Light Cruiser Squadron I and isolated destroyers who after pursuit of the boats of the outer German patrol line were seeking to join up with their battlecruiser squadron. These forces, likewise far superior in number, also avoided decisive action with the single German cruiser.

The report of Commodore Tyrwhitt also has other manifest errors. He maintains that ARETHUSA sighted S.M.S. MAINZ four minutes after discontinuance of the action with STRASSBURG and was engaged with her in battle, in which Light Cruiser Squadron I did not participate until 25 minutes later after MAINZ was already out of control and in a burning and sinking condition. Actually the action ARETHUSA-MAINZ commenced at 12:30 p.m. and was altogether indecisive until the participation of the three cruisers of the Light Cruiser Squadron I, SOUTHAMPTON, BIRMINGHAM and LIVERPOOL (12:45 p.m.). MAINZ received her first hits from these cruisers; she finally fell a victim to their superiority, not however to ARETHUSA. How little the flagship of Commodore Tyrwhitt at this time was equal to destroying a German cruiser fully capable to do battle, after she herself had been no match for a less powerful ship such as FRAUENLOB, is readily apparent from the fact that, shortly after the first meeting with STRASSBURG, the Commodore addressed various urgent signals with the cry for help to Vice Admiral Sir David Beatty. Since a similar request for assistance was received at the same time from Commodore Keyes, the Commander of the Submarines, on the destroyer LURCHER, Beatty at once dispatched the Light Cruiser Squadron, which with its three ships arrived just in

time to turn the battle with MAINZ in favor of the British. Also, just before these arrived on the scene of action, further disturbing signals were received from ARETHUSA, in which she reported the participation of a large German cruiser and advised that she was hard pressed and urgently needed assistance. Presumably they had mistaken STRASSBURG by reason of her four stacks with one of our old armored cruisers. Similar signals were also received from the Commander of Flotilla I. These radio calls for help do not harmonize with the description of the battle situation in the later report of Commodore Tyrwhitt, but they conform more nearly to the actual situation than the latter. At any rate they were adjudged so by the Commander of the Battle Cruiser Squadron. The situation appeared the more critical to the latter since the British light forces at this time were between the Jade and the Ems. His judgment was undoubtedly correct.⁽¹⁾ Consider the positions of the German cruisers at 2 p.m. and their situation relative to the British (see chart 29). Actually the British attack forces in their retirement were completely encompassed by the five German cruisers. With the unfavorable weather conditions and the confused tactical situation, it was a picture of what German cruisers were accustomed to accomplish in the scouting service. The fate of the British attack forces would in fact have been sealed had not assistance speedily arrived. The decision of the Commander of the British battlecruisers conformed to the situation and resulted in the destruction of at least three German ships.

(1) In this matter Beatty's report reads as follows: "Shortly after 12 noon (11 a.m. English time - translator), various signals having been received indicating that the Commodore (T) on ARETHUSA and Commodore (S) were both in need of assistance, I ordered the Light Cruiser Squadron to support the Torpedo Flotillas. Later I received a signal from the Commodore (T) stating that he was being attacked by a large cruiser, and a further signal informing me that he was being hard pressed and asking for assistance. The Captain (D), First Flotilla, also signalled that he was in need of help. From the foregoing the situation appeared to me critical."

When the requests for assistance came in, Admiral Beatty was already disturbed as to the whereabouts of two ships of the Light Cruiser Squadron which had previously been sent out but had not yet returned. The signals received left the matter in doubt. On the other hand, the last signal concerning the sighting of a large cruiser seemed to indicate that even the Light Cruiser Squadron would not be equal to the situation without support. Consequently he advanced at once with the battle cruisers; because, if further support was now to have any value, it must be, in his words, "overwhelming and carried out at the highest speed possible." Thus the risk of danger from enemy submarines had to be accepted despite the meager protection of only four destroyers. However, this could be taken the more lightly as their own high speed made such attacks difficult and the smooth sea was bound to facilitate the timely discovery of the submarines. Yet their presence was considered quite definite, for it was believed that three submarines had attacked them about 12 noon, although at this time all the German submarines were in Heligoland. However, Beatty saw the most serious danger to his advance in the appearance of a German battleship squadron, although he hoped that such a one could not come out in time if he accomplished his stroke with sufficient celerity.

Up to this time the British battlecruisers (LION, PRINCESS ROYAL and QUEEN MARY of Battlecruiser Squadron I, reenforced by INVINCIBLE and NEW ZEALAND) had occupied a supporting position about 30 miles to northward of the Ems. At 12:30 p.m. they advanced under command of their Admiral at maximum speed to the eastward. Therewith disaster approached the German ships. At 1:15 p.m. they met FEARLESS and Destroyer Flotilla I, who were retiring to the westward. Then they sighted the Light Cruiser Squadron in action with MAINZ bearing dead ahead - the latter already appeared to be finished. Neither the no

the British Admiral definitely establish whether or not battlecruisers still opened fire. At any rate, the battlecruisers turned to northeast course soon after sighting MAINZ, since renewed gunfire was heard in this direction.

There meanwhile, as the British report continues, ARETHUSA and Flotilla III had become engaged at long range with another cruiser of KOLBERG class (it was KOELN). At 1:30 p.m. these ships were sighted by LION - the German cruiser being to port of the British battlecruisers (see chart 28). Vice Admiral Beatty at once hauled off to the eastward in order to cut off this cruiser from Heligoland and at 1:37 he opened fire. At the same time KOELN reversed course and attempted to escape to Heligoland by passing ahead of the battlecruisers; but this course soon had to be abandoned since she was being pursued by ships making from 27 to 28 knots and at 1:42 she turned away to northwest. She still seemed to have hope of escaping destruction, particularly when at 1:56 the battlecruisers sighted another German cruiser with 2 stacks crossing their course and they now turned their attention to this ship.⁽¹⁾ It was ARIADNE; she was straddled by two salvoes from LION soon thereafter and set on fire by them. When she disappeared in the fog in a burning and apparently sinking condition, the British let her go. It appeared that the British Admiral had an important reason for doing so, since his destroyers had meanwhile reported that drifting mines had been observed farther to the eastward. However, this was in error. Apparently they mistook drifting ammunition cases, which were used on the German ships as containers for shells, for mines. Drifting

(1) This agrees exactly with the statement of the Captain of ARIADNE: KOELN was temporarily relieved and was lost to sight by the British Admiral, or, as the report states, "the German cruiser, standing to the northward, was being pursued by the opponent and doubtless was saved only through the participation of ARIADNE."

mines were never laid by the German forces during the whole war. The report sufficed, however, to prevent Beatty from advancing farther to the eastward. Besides, it was time to commence the retirement in order to effect the planned junction of all forces. Before doing so the cruiser, first taken under fire, was to be completely destroyed; consequently the battlecruisers made a wide turn to port to the reverse course. Soon KOELN was sighted with battle flag still flying, steaming at slow speed on course southeast. It follows that, when KOELN observed that the British were directing their fire toward the other side, she endeavored to disappear in the hazy weather toward the opposite side. Her speed must have already have been reduced and she must have suffered severely, otherwise the Admiral would not have particularly mentioned that her flag was still flying when she came in sight at this time. When KOELN saw the British squadron disappear heading to the northeastward, the cruiser attempted to cross astern of the enemy without expecting his sudden reversal of course. The fire of two turrets of the British flagship sufficed at the very short range to sink the ship at 2:35 p.m. after being struck by two salvos. With the sinking of his flagship, Rear Admiral Leberecht Maass was the first German Admiral to die the death of a hero. As a matter of fact, he was killed before the ship sank. With him the torpedo service lost one of its ablest leaders, to whom unfortunately it was not given to lead them in battle or in the night attack on the enemy. While KOELN was meeting her fate, STRASSBURG passed the enemy battlecruisers almost at the same time only four miles away. Her fortunate escape was probably due to the fact that the attention of the British ships at this time was concentrated almost exclusively on the sinking KOELN.

Unfortunately the British in this case did not show the same chivalry in rescuing survivors as at the sinking of MAINZ.

To be sure, as the British report states, the destroyers attached to the battlecruisers were at once sent out for this purpose, but they soon returned with the report that no one was found. This contention was inadmissible, as will later be proven.

With the sinking of KOELN, the actions of the day came to an end. Without having opposed an enemy that was properly a match for them, the battlecruisers turned to the northward at 2:40 p.m. and covered the retirement of the other forces until dusk. At this time it was again erroneously reported that submarine attacks were successfully evaded by ship maneuvers of QUEEN MARY and the light cruiser LOWESTOFT. By 7 p.m. all destroyers had rejoined or news had been received as to their whereabouts. Thereupon the battlecruisers with the light cruisers covering their rear altered course farther to the northward "in accordance with the Commander-in-Chief's orders." It is to be assumed that they were to rejoin in the northern North Sea with the Grand Fleet, which was also at sea on 28 August and at 7 a.m. was southeast of the Orkneys in Lat. $58^{\circ} 20'$ N., Long. $0^{\circ} 20'$ W. With an anti-submarine screen of two flotillas and a cruiser scouting line, the latter had advanced to the southward, but apparently did not go south of the 58° of latitude. At any rate about noon the fleet was in Lat. $58^{\circ} 19'$ N., Long. $0^{\circ} 21'$ E.⁽¹⁾ At 8:45 LIVERPOOL with 7 officers and 79 men from MAINZ was detached to Rosyth. Other work of salvage and rescue of own detached ships was left to Rear Admiral A. H. Christian.

According to the plan of the Admiralty, this officer was really to have had command of the undertaking and was to support it solely with the following ships assigned to him; the old armored cruisers, EURYALUS, BAGCHANTE, CRESSY, HOGUE,

(1) Particulars concerning Grand Fleet have been taken from the book THE GRAND FLEET by Admiral Viscount Jellicoe.

...the light cruiser AMETHYST. When the Commander-in-Chief of the Grand Fleet, Admiral Jellicoe, learned of the operation, he raised strong objections on account of the totally inadequate detail of supporting forces and as such he placed at their disposal Vice Admiral Beatty with his ships. The outcome of the battle proved the wisdom of this measure. Actually the old, slow armored cruisers of Rear Admiral Christian did not get to participate. Whether the Admiral with his ships was so far to the eastward, that the report of STRASSBURG concerning an armored cruiser of SHANNON class may be explained thereby, is doubtful. There is only a general statement in the report that he also took up a supporting position to the westward so as to intercept enemy vessels driven in that direction. According to him he did not commence his advance to the eastward in order to support the retiring light forces until 5:30 p.m. First of all he fell in with LURCHER and three other destroyers. LURCHER was present at the sinking of MAINZ and had gone alongside the sinking ship and rescued 220 men, amongst whom were many wounded. These were now transferred to BACCHANTE and CRESSY, which returned to the Thames, while AMETHYST took the heavily damaged destroyer LAUREL in tow. It seems that the latter had already suffered severely in the action with V-187 and later in the attacks on the German cruisers and had received not less than 5 full hits. The Captain was seriously wounded, the forward gun was out of action, another hit broke the main steam line, the after stack was almost completely knocked overboard, and also the detonation of own ready ammunition had caused further severe damage. In a desperate defence LAUREL had expended all except 3 charges, when finally she was lying helpless in the water and in danger "of being sent to the bottom or captured." Only the participation of own cruisers

LIBERTY, had to be taken out of action prematurely following an attack on a German cruiser. She had been hit by at least three shells, one of which put her generator out of action, while another one went through the smoke-stack.

After the engagement of the battlecruisers, ARETHUSA had meanwhile continued the retirement with 14 destroyers of Flotilla III and 9 destroyers of Flotilla I. After her speed had gradually dropped to 6 knots, the ship became completely out of control at 8 p.m. She had steam on only two boilers and had to request assistance. This was rendered by the armored cruiser HOGUE, which took the ship in tow at 10:30 p.m. and brought her safely back to the Thames where she finally arrived at 6 p.m., 29 August. Therewith the operations came to an end.

Looking upon the operation as a whole, there is no doubt but that it was a British victory. While the British did not suffer the total loss of a single ship or torpedoboat, the Germans lost three light cruisers in addition to the torpedoboat V-187. The loss of KOELN and MAINZ was to be felt particularly hard because, even though they were not the most modern German cruisers, their loss was to be felt very soon due to the small number of our light cruisers and the slow accretions of new construction for the scouting service. On the other hand, the damage to the other ships and boats on the German side was small, while that to the British cruisers, ARETHUSA and FEARLESS and the destroyers, LIBERTY, LAERTES, and LAUREL was so heavy that only timely assistance from their supporting forces preserved them from certain destruction. In consequence, ARETHUSA had to be placed out of commission immediately after arrival in port. On the other hand, Light :

(1) According to an article in the MORNING POST.

Corresponding to ship losses, our personnel losses were considerably higher than that of the British. On KOFIN alone we lost, in addition to the Commander of the Torpedoboats, Rear Admiral Laberecht Maass, 22 officers and 484 petty officers and men, and from MAINZ 12 officers and 336 men were taken prisoner. The total losses for this day were as follows: killed 712, wounded 149, captured by the British 381, amongst the latter were numerous wounded. Particulars are given in the following table:

SHIP	Officers		
	killed	captured	wounded
ARIADNE	3	-	2
KOELN	22	-	-
MAINZ	6	12	-
FRAUENLOB	-	-	2
STETTIN	1	-	1
V-1-7	-	3	-
V-1	-	-	-
T-33	-	-	-
D-8	2	-	1
Total	34	15	6

SHIP	Warrant Officers, Midshipmen, Officer candidates			Petty Officers and Men		
	killed	captured	wounded	killed	captured	wounded
ARIADNE	-	-	3	61	-	60
KOELN	17	-	-	467	-	-
MAINZ	9	5	-	74	331	-
FRAUENLOB	1	-	-	8	-	26
STETTIN	1	-	-	2	-	13
V-1-7	1	-	-	23	30	14
V-1	-	-	-	1	-	2
T-33	-	-	-	2	-	6
D-8	-	-	-	11	-	19
Total	29	5	3	649	361	140

Thus we have a typical picture of losses as they are sustained in naval battles, that is, a much larger proportion in the number of killed to the wounded and a similar proportion in the losses of deck personnel as compared to engineers and artificers, a very high percentage of killed and wounded of-

floers and finally the frequent loss of the whole crew when a ship is sunk. The number of prisoners taken on 28 August is exceptionally large, since the enemy was not disturbed in the rescue of the MAINZ personnel by the arrival of other German forces.

Compared to these figures, the British losses are infinitesimal if the particulars as published are complete. However, these are for the present contradictory in some respects. Thus in an article in NAVY AND ARMY ILLUSTRATED of 7 November, 1914, they are given as less than 70 men all told, while according to the news service from Poldhu of 1 September there were killed alone 69 men and according to further information there were on ARETHUSA not less than 96 wounded and 9 dead, and on the destroyer LAUREL 22 killed and wounded. Amongst others, the Captain of the destroyer LIBERTY and the signal officer of Commodore Tyrwhitt were killed. The meager British losses require further explanation considering the bitter German defence in all single actions and the firing which was certainly good. They are to be explained in part that the German ships and boats, which were in the battle, were frequently materially older and in all cases considerably weaker in armament than their corresponding opponent.

In German naval construction it was the aim to maintain the necessary balance of building weights at the expense of size of gun calibers and in favor of ability to remain afloat and to take punishment, as well as in favor of the number of guns. During the years 1909 to 1912 the fleet demanded that the light cruiser must be able to take under fire simultaneously two torpedoboats on each side for defense against hostile night torpedoboat attacks. For this reason the desired and much discussed increase of caliber was shelved in the summer of 1911, but by reason of further considerations it was taken up again in the summer of 1912. The transition from 10.2 (4 inch) to

15 cm (5.9 inch) for the light cruiser had not been accomplished in the British Navy until 1910 and it resulted in a considerable increase in displacement and cost. The mixed armament of two 15 cm (5.9 inch) and ten 10.2 cm (4 inch) of the BRISTOL class (1909) was not copied on account of the attendant gunnery disadvantages. The simultaneous fire control of two different calibers proved to be unfeasible. There appeared to be less objection to the demands of the fleet for the temporary retention of the smaller caliber, since a close tactical coordination of the light cruisers with the battlecruisers could be counted on in the majority of battle situations. The fighting power of the heavier ships should supplement the weaker light forces.

This point of view also governed in the choice of gun caliber for the torpedoboats. By day the torpedoboats were to carry the torpedo against the enemy line under the fire protection of battleships and cruisers. A heavier armament would have been possible only with a considerable increase in displacement. However, this would have meant impairing their maneuverability and thereby also reducing their chances in night attacks. In their construction the Torpedoboats were to be considered as a special type exclusively devoted to their main weapon.

On the other hand the British torpedoboat destroyer, as its name indicates, was built primarily for attacking the hostile torpedoboats. When therefore the German boats alone and without the protection of more heavily armed ships confronted the enemy destroyers on 28 August, the large superiority of each individual British ship as compared to the German must naturally make itself felt at once. The British destroyer was 20 to 50% larger than the German boat of the same age with three 10.2 cm (4 inch)⁵⁰ cal. guns and one machine gun as compared to two 8.8 cm (3.5 inch) 30 cal guns and four machine guns. Thus it is understandable that the situation for the German boats

mitted the British to fire at longer ranges; while the effect of the German 8.8 cm (3.5 inch) shells was insufficient to either stop or sink a destroyer. Being also superior in speed, the British destroyers were such dangerous opponents that the German boats had to depend on the protection of the cruisers during the actions of this day, without on their part achieving results worthy of note. Even granting the correctness of a one-sided development of the torpedoboat for the night attack and the massed attack on the enemy line by day, the experience of this day aroused misgivings that, with destroyers warding off the attack of German torpedoboats in battle, the latter would hardly be able to bring their torpedoes to bear against the real target - the enemy battle line.

It had also been shown that a single light cruiser could offer the boats only scant protection because it was too difficult to bring her guns to bear effectively against a large number of destroyers; in the first action of STETTIN it was almost impossible even to designate the point-of-aim. Probably similar observations were also made by the enemy. Thus it became necessary for both parties to outfit the cruisers with special means for designating point-of-aim. As such, it was proposed to provide electrical train indicators which would permit the firecontrol officer to automatically bring all guns on the same angle of train directly from the fire control station.

The experiences of 28 August further indicated that the British weapons on this day had been unable to bring about the sinking of a single ship or boat entirely due to their own fire effect. MAINZ had remained afloat for about an hour even after the torpedo hit, and, as far as could be determined, her armored deck had not been penetrated. ARIADNE and V-187 also did not go down until after the opening of the sea valves, the explosion

On the other hand, one must admit that greater damage to the opponent would have been done had our cruisers, like those of the British TOWN class, been armed with 15 cm (5.9 inch) instead of 10.5 cm (4.1 inch) guns and our torpedoboats with 10.5 cm (4.1 inch) instead of 8.8 cm (3.5 inch) guns. That several enemy destroyers escaped destruction even after six or more hits, as was definitely established in two instances by the Executive Officer of MAINZ, is to be explained solely by the relatively small gun caliber of our cruisers and torpedoboats. In addition, in two cases, German shells, probably those with inner ignition, passed through the bow and stack of a destroyer without bursting. To be sure, such cases were considerably more frequent with British ammunition. According to the report of STRASSBURG, almost half of the enemy shells did not burst. All of the British 10.2 cm (4 inch) shells seemed to be cast-iron projectiles filled with black powder and had a very small bursting effect; consequently the large weight of shell was scarcely more noticeable in its effect on the target than the lighter German projectile.

Probably the primary purpose of the British undertaking was to give to the world proof of the battle readiness of the British fleet since the initiative up to this time had manifestly lain with the much weaker German fleet. Without departing from her true fundamental of the strategic defensive, the challenge of the German cruiser, mine and submarine operations was to be answered. The British fleet was to show that the old, glorious traditions of their Navy still lived, even though the changed conditions of modern naval warfare no longer permitted them to occupy their time-honored position directly off the ports of the enemy. If in so doing, they were successful in enticing the German capital ships out of their enforced and irksome idleness and if they could first of all damage the

...more fulfilled. Since it was considered a prestige undertaking, any possible failure had to be avoided and own hazard reduced to a minimum. For this reason, a bombardment of the German coastal fortifications, particularly those of Heligoland, which were deemed to be impregnable, was not considered. Moreover, the undertaking was considered solely as a lightning raid on the German patrols, whose positions had been thoroughly and successfully ascertained by submarines. The means conformed to the purpose; by utilizing the tactical advantages, which in such cases, particularly in naval warfare, fall to the lot of the attacker, they were enabled to enter into all individual actions of this day with prodigious superiority. Nevertheless, the success of this day hung by a hair, because the German cruisers through the keenness of their crews, the good training, the efficiency of the officers and the energy of the Commanding Officers showed that they could meet even this superiority to such an extent that the attacks on the German patrol line almost resulted in failure. The flagship of the British attack forces, ARETHUSA, was heavily damaged and practically put out of action in the battle with the much older and more weakly armed FRAUENLOB, while the attacker had been able to bag only a single torpedoboat of the patrol line. Furthermore, STRASSBURG and STRALSUND fought creditably against foes who were at all times superior. Finally the retiring attackers found themselves enveloped by the German light cruisers in the afternoon, and complete annihilation threatened them. Arriving just in time and extraordinarily smiled upon by luck, the battlecruisers and Light Cruiser Squadron I in formation decided the day in Great Britain's favor.

It is sad to relate that the German spirit of the offensive itself was to bring them disaster here, because after the endangered patrol flotillas had been brought to security

The responsibility therefor lies^{less} with the cruiser Captains, whose initiative and offensive spirit can only be acclaimed, than with the High Command. Even if the directions for naval warfare prescribed independent action on the part of the cruisers, those in high command should have drawn the line against this independent advance due to the weather conditions which were known since 11:30 a.m. and due to the low water which prevented their timely reenforcement by heavy forces. The fleet did not consider that stronger forces were backing up the attackers; on the contrary, the order to MAINZ - an individual cruiser - to attack the enemy in the rear indicates how gravely they were deceived as to the strength of the resistance to be expected. According to statements of the Fleet Commander in his memorandum concerning the conduct of the High Seas Fleet in the first half year of war, he, as well as the Commander of the Scouting Forces, assumed that in this case British light forces only had to be dealt with, just as we on our part had up to that time executed advances to the English coast only with minelayers, light cruisers and torpedo-boats. In the first telegraphic battle report of the Fleet Commander to the Emperor, the heavy losses are ascribed next to the unfavorability of the weather conditions to "the long suppressed battle ardor and the indomitable will of your Majesty's ships to get at the enemy." In this regard it should be emphasized that the cruiser Captains, once they had been ordered to give chase, did the right thing. When, then, in the hazy weather they suddenly found themselves opposed to a superiority, it was no longer possible in most instances to escape due to the inferior speed of our light cruisers as compared to their battlecruisers.

To be sure, the cruiser Captains had left the High Command in doubt as to an important factor in estimating the situation.

not one of the ships at sea reported the decreasing visibility and the presence of fog. Since it was entirely clear in the river mouths, the High Command dealt with false premises in this respect unknowingly and unblamably. Furthermore, the question has arisen, whether it would not have been expedient to send out to sea in support at least Squadron II at about 9 a.m. when according to the radio reports the actions to the northwestward of Heligoland were at their height. In contrast to the capital ships this squadron was not hindered by any navigational difficulties from standing out. However, even with all possible haste, this squadron could not have arrived with four ships in square 116 epsilon, the focal point of the cruiser actions, until 2:30 p.m. There, according to all indications, they would have collided with the five British battle-cruisers with just as much surprise as did the light cruisers. Still the outcome of an action between the most modern capital ships and old battleships could not be a matter of doubt. The engagement of these ships would in the end have led to their destruction, perhaps after heavy damage to the opponent.

The lesson for the future that was drawn from the battle of 28 August was that patrol forces were to retire at once upon sighting superior hostile forces to within gun range of Heligoland or into the river mouths, so as to deny the British any further successes against the light forces. In his battle report of 30 August the Fleet Commander expresses himself thereon as follows:

"The incursion of enemy forces into the German Bight on 28 August represents a well-prepared undertaking carried out with large means. The advance was favored in a high degree by the prevailing weather and reduced visibility. It is to be assumed that the British submarines which have repeatedly been

waited for weather with reduced visibility, such as prevailed on this day. Also it seems they took into account the offensive spirit presumed to exist in the German fleet. We should draw a serious lesson therefrom. As hard as it may be, we should hold back own forces as far as possible in similar operations of the enemy, or we should put out at once with the whole fleet and run the risk of possible losses by hostile submarines. If and when the enemy comes, he will appear only with his most modern forces and with such a superiority that he will be secured in any case from a serious reverse.

"With similar weather and visibility conditions we must reckon with the repetition of such, or similar, undertakings. We must take such measures that no attack objectives with mentioning will fall prey to enemy superiority in such advances before the decisive battle, if the nature of the undertaking is not such a one as to require full employment of all forces, as for instance, an attempt to block the Jade or similar operations."

With the order to the patrol forces to retire at once in the event of new attacks, the main point of the question had not been touched because without the immediate employment of the capital ships the danger of rolling up the patrol forces by faster, and numerically superior, enemy ships even in clear weather remained the same as before. The mistake of utilizing light forces in positions relatively far advanced from own bases while at the same time holding back the capital ships in the river mouths had not yet been clearly recognized.

In this connection the statements of some of the torpedo-boat Commanders, which were in the battle of 28 August, are interesting. Thus the Commander of Torpedoboat Half-Flotilla I, Commander Tegtmeier, expresses himself as follows: "The relatively large distance of the patrol line from Heligoland as a

base is disadvantageous for the torpedoboats. Also the support of own cruisers was not found until right close to Heligoland. Had the weather been more hazy and the flotilla less fast, these disadvantages would have been even more serious. From the point of view of the flotilla it is therefore expedient to draw in the patrol line closer to Heligoland even by day and to hold the flotilla cruisers in readiness there."

Similarly the Captain of G-9, Lieutenant Commander Anschütz states: "It is fortunate that on this day Flotillas I and V were on watch and on the patrol line, because they could to some extent equal the speed of the British destroyers."

Another Commanding Officer believes that if two or three light cruisers had been stationed on each flank of the patrol line it would have been an easy matter to roll up the whole line of British cruisers and destroyers, and therefore he holds that such a strengthening is urgently necessary for day and night security. The Commander of Flotilla V goes even further in holding that armored cruisers are necessary for the support of the patrol line. Yet, oddly enough, in no war log, not even in one of a Squadron Commander, is there reference made to the fact that the reverse which had been suffered was due less to the individual measures of the day than to the weakness of the system. That this was actually the case may be shown by the following considerations:

One might strengthen the patrols ever so much with light cruisers and even with capital ships, yet it always remains possible for the opponent, after prior reconnaissance which necessarily is done by submarines more or less schematically, to advance against the patrol line in a definitely predetermined position, surprising it with a superiority before reinforcements can arrive. This view was shared by the Chief of the Naval Staff, v. Pohl. He broached the subject to the Emperor after 28 August, without, however, seeking to effect a change of the system in

forces; this was limited by the number of available ships, the necessity of relieving them for fueling, material overhaul and rest for the crew. In addition the danger of submarines warned against the employment of capital ships in fixed patrol positions. The weakness which the attacker clearly recognized thus lay in the system itself. Thereby, however, it was feared that with the repetition of such attacks "the equalization of forces" sought by the Germans must, slowly but surely, result to our disadvantage. Consequently it should be determined whether the effectiveness of the existing security was commensurate in any way with the employment and expenditure of energy, or whether security could not be attained more easily and more expeditiously by other means. The first question must be answered in the negative, the second in the affirmative.

As 28 August clearly proved, a penetration of enemy submarines into the German Bight as far as off the river mouths could not be prevented despite a triple line of craft and consequently the latter could in no wise fulfill their primary purpose. In addition, due to the large intervals between the singly stationed torpedoboats, they lacked any power of resistance to even the weakest craft. On the other hand, the apprehension of enemy submarines penetrating to positions off the river mouths had proved to be exaggerated. The thought that the enemy would maintain a closer watch on the German Bight had unconsciously figured in building up this organization. Certain persons took the appearance of the British forces on 28 August to mean that the latter were instituting a close blockade forthwith. However, after opinion gradually became settled as to the real disposition of the British fleet and the evaluation of the submarine danger, a fundamental change of the system for securing the German Bight had to be made. The security could no longer stretch out beyond the range of the guns

forces. Due to a considerably smaller expenditure, this meant also a large saving of personnel and material. Minefields must take the place of the far advanced patrol lines. If the former were laid out in the main approach directions, it was certain that sooner or later the enemy would suffer losses, above all in submarines, and make his further operations hazardous. The farther outside of Heligoland these fields were laid, the more they must come as a surprise to the enemy, while own forces could pass around or avoid these fields more easily than the enemy by means of certain navigational measures.

The Commander of the Scouting Forces at once advocated such minefields, based on his argument that the disadvantages due to hampering own forces were far outweighed by the advantages. The consideration of the Naval Staff that such measures would unfavorably affect the freedom of maneuver of own fleet was pertinent only so long as one could expect that the enemy would give battle in the vicinity of Heligoland. In view of the defensive conduct of the opponent this expectation could no longer be entertained; all factors favored securing the deployment area of own fleet in the Heligoland Bight by minefields. Therefore the Fleet Commander endorsed the proposition of the Commander of the Scouting Forces and, after the necessary preliminary work had been accomplished, had minefields laid near Heligoland in September - of these more will be said later on.

According to the proposal of the Commander of the Scouting Forces, airplanes, airships and submarines were to undertake the watch of the minefields as well as the distant reconnaissance beyond gun range of the bases in order to have timely information of the approach of hostile forces. The Commander of the Scouting Forces proposed the constant maintenance of a submarine line advanced about 60 miles by a considerable number of submarines. Considering the total number of submarines, this

Due to the planting of minefields for the protection of the German Bight, the larger part of the light surface forces became available for other tasks. Instead of being tied to a patrol line, they could more than ever make advances, supporting the distant scouting of airships and airplanes according to the weather and visibility conditions. These advances had to be varied continually as to extent, form and composition of forces. Besides, the torpedoboat flotillas by unexpected and altogether irregular advances could make the stay of hostile submarines in the inner German Bight considerably more difficult than heretofore, when the former were held on a fixed patrol line. This largely increased the fighting strength of forces gathered for an advance and offered the possibility of attacking at once with adequate means or of inflicting losses on the opponent during the retirement. At any rate it offered ^{better} prospects of bringing about the desired equalization of forces than had the former procedure. However, one thing was absolutely necessary. In such cases, there must be at sea for the support of the torpedoboats not only light cruisers but also capital ships.

In this connection the following was to be considered: The 28th of August had shown that the British would come, if at all, only with fast and heavy forces. Thus, if own battle-cruisers or a squadron of battleships were now sent out to support own scouts at sea, an action of capital ships could develop at any time. It would be difficult to break off such an engagement after damage had been received. In such event, however, the participation of further squadrons was inevitable, and a battle would ensue, perhaps under conditions unfavorable to us or at a time which did not conform to the wishes of our political leaders. The restrictions of the German naval conduct

north sea. Thus it came about that the capital ships were held back, as expressed therein.

However, the most serious after-effect of 28 August was psychological rather than material. On the light cruisers and torpedoboats, the lack of support by the heavy forces was felt the more bitterly because, with the power of resistance of even the older battleships, their gunnery proficiency as well as the thorough training of the crews, there appeared to be not the slightest doubt that had the strength relationship been just a little more favorable it would have been a German victory. For the most diverse, and frequently improper, reason, the High Command was held responsible that this had not been the case. Added to the disappointment that any offensive activity remained denied to the capital ships came the feeling, difficult to check, that they were not led with sufficient energy in the defensive as well. One was inclined to estimate the losses suffered and therewith the British victory higher than they deserved. Instead of looking for the mistakes first of all in the organization of the service of security, many within the fleet sought to prove shortcomings and negligence in particulars and at the same time to exaggerate them. These are all typical manifestations of an unfortunate outcome to the first engagement with the enemy. It required some time until these psychological consequences of the battle were overcome. However, above and beyond all else, it was brought home to the German Navy that the crews of every individual ship and torpedoboat had manfully undergone their baptism of fire and, when their ship was doomed, met the end with heroic spirit of sacrifice. Consequently the spirit of the offensive of the German forces had not suffered as a result of the impressions of 28 August, that was shown already

...the Fleet Commander sensed correctly the sentiments of the crews when he reported the following to the Emperor: "However heavy the losses, this first collision with the enemy gave proof of the eagerness to do battle, the tenacity, and the highest personal courage of all hands on your Majesty's ships and boats; confidence in own ability has not been shaken but rather it has grown."

Even the men, who suffered most severely under the enemy's fire, actually had only one desire, to get at the enemy as soon as possible and to revenge their fallen comrades.

This description of the first serious encounter with the enemy in the North Sea cannot be concluded without presenting a few important particulars regarding the various sinkings of ships. Despite the frequent chivalrous conduct of the British and despite their recognition of the extraordinary bravery of the Germans, yet even at that time the British attempted to revile their opponent and to lower him as much as possible in the eyes of the world by press propaganda. Unfortunately the Germans at that time did not appreciate sufficiently the effectiveness of these attempts to engender hate against us throughout the world.

Thus in the British report the participation of STETTIN after the sinking of V-187 provides, under complete misinterpretation of the motives, the welcome opportunity to place British humanity in a favorable light as compared to the alleged German disregard of the usages of war amongst civilized peoples, as is shown by the following quotation, "our destroyers had been fired upon by a German cruiser during their act of mercy in saving the survivors of the German destroyers!" How the situation appeared in reality is shown beyond all doubt in the report of the Captain of STETTIN; he had no idea of the work of rescue of the British boats. It is manifest that the latter might just as well have been engaged in salvaging

not be lost to inflict further damage on the enemy. There was no indication whatsoever that the boats were engaged in rescuing survivors. Due to sighting the enemy destroyer at short range by reason of the poor visibility, STETTIN was in considerable danger of being promptly torpedoed by them. In addition, as is admitted in the British report, at this instant the British submarine E-4 actually launched an attack on the cruiser, to be sure, unsuccessfully. Accordingly the Captain of STETTIN could not have done otherwise. It was his duty to take up the battle, however much the unfortunate meeting is to be regretted by the Germans, in that a work of humanity was unwittingly interrupted thereby. Yet the British Commander-in-Chief at that time, Admiral Viscount Jellicoe, renews the reproach in his book concerning the operations of the "Grand Fleet" five years after the event had transpired. Meanwhile the facts should have been perceived in their true light. Nevertheless he compares this instance to the truly chivalrous action of Commodore Keyes in rescuing the survivors of MAINZ with the remark: "Even thus early in the War the difference between the behaviour of British and German seamen was noticeable."

A German witness of the events attending the sinking of KOELN is available. It may be irksome to the British that a survivor of this ship should have presented himself to gainsay on essential points the report of Admiral Beatty and to direct strong accusations against the conduct of the British on this occasion. The report of Beatty concerning the sinking of KOELN reads as follows: "LION opened fire with two turrets, and at 1:35 p.m. (English time), after receiving two salvos, she (KOELN) sank."

"The four attached destroyers were sent to pick up survivors, but I deeply regret that they subsequently reported that they searched the area but found none."

was picked up by torpedoboats of our patrol line. He was found drifting around among corpses in lifejackets of this ship. He provided the following information:

"When Neumann came on deck, KOELN had been rendered out of control by a hit on the engine. Most of the officers, among others Rear Admiral Maass, Lieutenants Seydlitz and Braun, had been killed ; Captain Meidinger commanding had been seriously wounded. Upon the order "All hands abandon ship" about 250 men gathered on the quarterdeck; among them were Chief Engineer Liepmann, Paymaster Gelbke and a few Lieutenants. Three hurrahs were given and the flag song was sung. Stoker Neumann continues his story as follows: "Then, following the example of a leading stoker, we said good-bye to the Chief Engineer. Then the order was given "All hands abandon ship." Thereupon we screwed the covers on the cartridge cases, threw hammocks overboard and then jumped overboard ourselves. When I had drifted about 100 meters away from the ship, a white smoke-cloud shot high out of the forecastle and then another from the poop, no explosion. First the bow came out of the water; then, following the white smoke-cloud from the poop, the stern with rudder and propellers; then the ship listed over to port and sank.⁽¹⁾ The British ships remained on the spot until she sank, made no effort to rescue survivors and then steamed away. The British could readily have done so, because a large number of men remained afloat for several hours. On the next day I saw close around me 60 men apparently still living. One after the other these fell prey to the sea." Neumann was able to stay afloat only by using two lifejackets and a piece of cork. On the day of his rescue, he with five men, amongst them the Paymaster and a machinist, were able to get ahold of the riddled wherry of KOELN. Yet

(1) Thus the ship was apparently blown up by her own crew and broke in two amidships.

one after the other of these were overcome by hunger and exhaustion.

The real reason for the incomprehensible action of the British destroyers is not contained in the official British report. However, they appear to be disclosed in the report of a British naval officer, which in other respects also rings true and which shows a chivalrous and humanitarian conception. He saw with his own eyes from a destroyer the sinking of KOELN. He writes as follows⁽¹⁾:

"KOELN fared even worse than MAINZ. The whole ship was in flames and was completely enveloped in heavy smoke. But the remarkably brave crew would not yet give up the fight. Only three guns could still be used and the ship itself was a complete wreck. However, the heroic German seamen refused in any case to strike the flag. After our cruisers had silenced the guns on KOELN, they withdrew and sent up the destroyers to assist those remaining on board. However, when the guns opened up on us again, LION was forced to sink our valiant foe. We looked on with real regret because she had made such a splendid defense against great odds. When she sank, LION signalled to us to hasten to the scene of action and rescue as many of the German crew as possible. Just as we were ready to put our boats into the water, however, a submarine was seen, so that we were forced to leave a few poor devils to their fate. Had we remained, the submarine would certainly have sent us to the bottom."

However, it is in error that they were only "a few poor devils," as there were about 250 men. Furthermore, it is in error that a German submarine was in the vicinity because all

(1) From the Swedish newspaper DAGENS NYHETER of 11 October, 1914. Translator's note: - This quotation was apparently translated from English into Swedish, then into German, and now again into English. The original cannot be found for verification.

the German submarines were at Helligoland at this time. Even so it is not necessary to assume that the mere sighting of a German submarine should be a legitimate excuse for failing to rescue the German survivors. The recognition of German brutality^{expressed} in this report and the good intention to help which doubtless follows from this recognition speak against it. However, this argument is lacking in the official report, and in place thereof is a crude misrepresentation founded on the erroneous assumption that no witnesses would survive to dispute same. Thus one can see how even at that time the libeling of the German conduct of war in contrast with the so-called humanity of the British methods was considered one of the most effective means of the enemy's conduct of war and everything possible was done to avoid the publication of incidents which did not conform thereto.

Only in this way can we explain the malevolent contention in the official British report as well as in the announcements of British representatives in neutral countries that German officers had fired at their own people with their revolvers, especially at those swimming in the water to prevent them from being picked up by British rescue boats. The DAILY CHRONICLE gives as the reason for this action of the German officers, which at first glance seemed altogether incomprehensible, that under the stress of battle they were no longer mentally responsible. It was alleged that British naval officers with their own eyes had seen German sailors shot in this way; also it was claimed to be definitely established that certain rescued men had wounds of such a nature. How these wounds were actually received is explained most clearly in the report of Lieutenant Jasper concerning the events which transpired after the sinking of V-187. He states in this report:

"Some of the men were picked up by the British destroyers with lines and buoys. I myself was picked up by a British

row-boat after I had been swimming for a few minutes. This boat had three other men of the crew of V-187 on board.

"After the boat had waited around inactive for a long time amongst several men swimming in the water, it finally returned to the destroyer upon signal from her. At this instant a German light cruiser opened fire on the destroyers. The British crew of the row-boat went on board their destroyer. I refused to go on board with my three men, so as not to be taken prisoner-of-war. The British destroyer started away at high speed. A British seaman threw off the bow line - apparently by mistake. Another British seaman saw that our boat was beginning to drift astern, and threw a loaded projectile into it. It lay where it fell without exploding. Several revolver shots were also fired at us with no effect.

"I picked up 16 more survivors with my British row-boat.

"Another British row-boat under the command of a British officer had likewise been left behind by the destroyers. In this was Lieutenant Braune with several survivors.

"After some time a half-submerged British submarine came in our vicinity from the eastward. She surfaced and took aboard the British crew of the one row-boat and Lieutenant Braune. I kept my distance from the submarine and took off my coat, so as not to be recognized as an officer and taken prisoner. The submarine then ran up close and inquired whether any British officers were on board. We made no answer. The submarine, which had the designation E-4 on the bow, submerged and disappeared to the westward.

"Another small British boat, in which were five more survivors of V-187, joined me.

"I estimate that from 10 to 20 survivors were picked up by the British destroyers. The rest of the crew, 20 to 30 men, were dead or seriously wounded when the completely riddled boat went down in square 133 epsilon right center *****

"I would like to mention with praise the conduct of torpedo-seamen Kleemann and Klosters. They were picked up by a destroyer but, when the German cruiser approached they jumped overboard under a spirited pistol fire of the British and thus escaped being taken as prisoners-of-war."

This description gives an altogether different picture of the conduct of the German officers and men. We must note with admiration that to the last these resisted with all their might being taken prisoners despite the threat of pistol shots to the risk of their lives; this, some of them were successful in doing.

At that time the Germans had no understanding of British calumny; it was difficult to perceive its purpose. Now, after the attendant manifestations of the German collapse, we must evaluate altogether differently all these individual efforts to create a barrier between the German officers and men and we recognize with astonishment how early this clear-sighted work of our opponent was undertaken in their direction in the press. As a characteristic document showing the moral depth and nature of this poisoning as it was carried out even at the beginning of the war, appendix 20 quotes an article from DAILY MAIL of 11 September, 1914, concerning alleged happenings on board MAINZ during the action. The best refutation of the slander against the spirit of the German crews expressed therein may perhaps be the description of the sinking of MAINZ by a British naval officer, who gives his impressions in a press report as follows:

"MAINZ was exceedingly brave. The last that I saw of her was a complete wreck; amidships she was a smoking hell, yet one gun forward and one aft were still hurling death and destruction. So she reminded one of a wild cat crazed with wounds."

This report tells the whole story. No crew will fight like that, if they can be held to the performance of duty only

by the pistols of the officers.

Nevertheless the carefully planned nature of such calumny was not perceived by us at that time. When this article amongst others became known in the Naval Staff and consideration was given by it as to whether it should be given to own press in order to show with what means of falsehood the opponent worked, the then Chief of the Naval Staff, Admiral v. Pohl, under this provocation wrote: "Why? Don't pay any attention to it!"

This neglect to combat the campaign of lies waged against us with all means of psychology and in the press of the whole world finally became one of the reasons for our inner dissolution.

How, in contrast to these misrepresentations, the relationship between the German officers and men actually was, how they tried to outdo each other in works of mercy, is best shown in the events which transpired with the sinking of ARIADNE. Thus in closing a few words will be devoted thereto. The Captain of DANZIG reports as his own observation the following:

"Lieutenant, junior grade, Garnich of S.M.S. DANZIG went alongside the bow and was the first to climb up onto the fore-castle by means of a line hanging over the side. He was followed by seaman first class Graul of S.M.S. DANZIG and a machinist's mate of S.M.S. ARIADNE, who had previously been picked up out of the water. I do not remember the name of the latter.

"Having arrived on the fore-castle of S.M.S. ARIADNE, the three rescued two seriously wounded men by securing them to lines and lowering them into the boat. Before doing so, Lieutenant, junior grade, Garnich cut off a leg of one of the seriously wounded men with a knife, as it hung only on a remnant of flesh and skin and otherwise it would have been impossible to transport this wounded man.

All three men undertook the work of rescue with greatest danger to their lives, as the ship was burning hard under the

forecastle and continued explosions took place.

"The determination and devotion shown deserve, in my opinion, special recognition.

"The conduct of the crew of ARIADNE was superb. When S.M.S. DANZIG came alongside to help, it seemed that everything in the below-decks compartments of the tattered ship was on fire. Continued explosions of ammunition hurled long sheets of fire, shell fragments and splinters to all sides.

"A large part of the crew stood or lay wounded on the fore-castle. Another part, among them many wounded, were on deck amidships. The Captain with other officers and a few men of the signal force stood on the bridge and remained there to the last.

"The bridge, fore-castle and port side amidships appeared to be the only places where men could stay.

"With the arrival of S.M.S. DANZIG, the crew gave three hurrahs and then sang the flag song. According to statements of survivors, the Captain made an address at this time.

"After their rescue also, the conduct of ARIADNE personnel was excellent. Even those who were horribly wounded were superb in their deportment. No crying, no complaining, scarcely an occasional groan. The spirit amongst the rescued was very good, almost pleased, and only desire for prompt rest was voiced.

"Upon direction of his Captain the quartermaster of S.M.S. ARIADNE brought a soaked chart on the bridge to report a hostile submarine which ARIADNE had sighted shortly before but could no longer report.

"In conclusion I would like to mention that the crew of S.M.S. DANZIG also carried out the work of rescue quickly and without hesitation, even though they fully appreciated the great danger which hovered over them due to the hail of shell fragments of ARIADNE on the one hand and due to the vicinity of the hostile battle cruisers and submarines on the other hand ..."

These statements are verified by the report of the Captain of ARIADNE.

After naming 18 members of the crew who distinguished themselves particularly, he closes as follows: "Of the officers who did their duty throughout with the greatest presence of mind and discretion, I would particularly mention my aide, Lieutenant Zimmermann, who stood next to me on the bridge to the last, and the torpedo officer, Lieutenant Besserer who with me and Lieutenant Zimmermann left the ship last of all after he had directed the transfer of the wounded with the greatest discretion. Finally also Lieutenant, junior grade (Reserve) Westermann, even though lightly wounded, returned aboard the burning ship to rescue survivors.

"The flag lieutenant of the harbor flotilla, Lieutenant Commander Brunswig, jumped overboard and rescued a drowning machinist."

Since the British report reviled the spirit of comradeship between the German officers and men, these events had to be described in such detail.

All in all, they furnished proof of the heroic, self-sacrificing spirit of the cruiser and torpedoboat personnel of the High Seas Fleet - this spirit was to be a model for all further actions in the North Sea and finally led to the victory at Jutland. That was the chief gain of the actions of 28 August.

3/1/35

THE WAR AT SEA, 1914-1918

NORTH SEA

VOL. I

Chapter 6

The British Blockade

Published by

German Naval Archives

Naval War College
Department of Intelligence and Research
February, 1935

Translated by
Lieutenant Commander W. E. Findeisen (MC), U.S. Navy.

The appearance on August 28th of heavy British battle forces off the German patrol lines in many ways, from the German point of view, became the occasion for hoping that probably a new phase of the British conduct of war at sea, a closer blockade or at least an execution on a greater offensive by the British battle forces might be initiated. This expectation, nevertheless, very soon established itself as erroneous, and the uncertainty of the possibility of making contact in the area of the expansive North Sea with the enemy, who persisted in remaining apparently on the strictest defensive, therefore, remained the same as before. Neither submarine raids nor cruiser or torpedo-boat thrusts had been able to clarify the mystery which as heretofore remained obscured concerning the bases, stations and concealment of the British fleet. Only this much was believed to be established, or was permitted to be suspected that the First Fleet, or perhaps even also the Second Fleet, was assembled in the extreme north, quite distant from every attack of our light forces and that it had crossed over periodically along the west coast of Norway opposite Stavanger and Aalesund; that powerful destroyer groups protected the east coast against attacks and that probably a permanent line of blockade was spread out in the direction from Stavanger to the Scottish coast. Furthermore, it was believed upon evidence from a few submarine observations that the Skagerrak was patrolled by cruisers and torpedo-boats, however, the only security line which was positively established through our own scouting forces consisted of a line of outposts of destroyers off the Channel in the direction from Yarmouth to Haaks light ship. This line was apparently laid out only at night and during the day was relieved by submarines.

Only now after the close of the war does the solution become clear how the German Fleet Command at that time was hampered so

extraordinarily in the execution of its effective operations, and it is the Commander-in-Chief of the Grand Fleet at that time, Admiral Viscount Jellicoe of Scapa, who himself in his book, "The Grand Fleet 1914 to 1916", discloses the latter's creation, development and functions. Consequently, according to his detailed information, we can now follow the activities of the enemy's fleet practically from day to day during the first two years of the war. Considering our own measures and conjectures, this hitherto undisclosed information is, however, subject to be tested on its merits and the picture of events to be completed.

In the introduction Jellicoe maintains, positively, that the preliminary mobilization of the fleet, thanks to the determined and responsible management of the Minister of the Navy and the First Sea Lord, and not without opposition from the government, was maintained throughout the period of tenseness by only a few restricted measures so that on the declaration of war, the mobilization of the British battle forces had already been completed. Thus right in the beginning, incalculable advantages were secured to the British naval war command.

The details of the deployment are evident from Chart 30. The strategic purpose for the selection of so far northerly situated bases in a naval war against Germany was nevertheless first sanctioned in recent years. For that reason the improvement of Rosyth and Cromarty in no way was completed at the outbreak of the war, and the one of Scapa Flow was not even begun. Thus the British Commander-in-Chief was confronted with a very difficult situation, namely: that of a possibility of surprise attack from hostile submarines and destroyers, or even of an attack from the entire German fleet in spite of the opposition of adverse circumstances. The great distance (450 miles) of the German bases was appropriate for the selection of this harbor situated amongst the barren and only slightly inhabited Orkney Islands, as the main base of the British fleet; besides, in

view of the strong and changing tidal currents and the rock abounding channel, the obstacles of navigation could only be overcome with considerable danger by an opponent so little acquainted with the channel; finally, the attacking party also had to be prepared not only before the attack but also after it to be threatened during the long advance or retreat by the British fighting forces at sea. Nevertheless, the British fleet command found itself in a continuous state of unrest concerning the safety of the ships at anchor here on account of the fueling situation and as long as adequate means of defense of the harbor against submarines and destroyers were lacking. Even when the ships were at anchor, the condition of readiness could not be relaxed, and on account of the shortage of adequate coast defense equipment and submarine nets, the protection of the fleet in port in the early period devolved correspondingly upon the overburdened cruisers and destroyers. On this account this base offered no recreation for the fleet which for the reasons just stated was usually at sea.

It is true Scapa Flow already had been designated as the main base one or two years before the outbreak of the war, but in view of the fact of financial limitations, the improvements, particularly the project of the fortifications, had to be postponed from year to year. Therefore, there remained nothing else to do except to land twelve and three pounders from the fleet, thereby establishing a make-shift harbor defense which later on was reinforced with ten and fifteen centimeter guns and by special service crews of the Royal Marines. But in as much as search lights for these defenses could not be provided in the beginning, not very much was to be expected at night from the employment. Irrespective of the outpost patrols, cruisers and destroyers at anchor had to take their places at the various harbor entrances. Nevertheless, Hoxa Sound appeared quite

...new submarine, but only through extraordinary clever navigation. An entirely safe protection in turn could be accomplished only through nets and cordage barriers, the furnishing of which however was delayed until winter. For the present, one had to be content with the idea of at least trying to deceive the enemy as to the presence of such equipment of defense.

Very early assurance against destroyer attacks was manifest through the commissioning of old battle ships for harbor defense. For this purpose, as early as August 6th, the "Hannibal" and the "Magnificent" were called in by the Admiralty and were put in commission. On August 15th three sea planes and two land planes supplemented the harbor defense.

Even the more prepared bases of Rosyth and Cromarty were still completely unprotected against submarines at the beginning of the war. As a matter of fact sufficient artillery protection against destroyer attacks was available, yet on account of the scarcity of cordage and timber obstructions their attack did not appear completely excluded. Due to the high regard for the German submarine and torpedoboat weapons, the concern over their attacks on the British ships even within the bases was considerable. This apprehension, more than once, through false alarm caused a sudden halt in fueling at Scapa, and caused the immediate withdrawal of all ships to sea; the latter occurred even at night and in obscure weather under difficult and precarious maritime conditions.

In fact, the limited radius of action of the (German) torpedoboats, organized along general plans of a strategic defensive which resulted in the employment of the torpedoboat flotillas for the defense of the German Bight and in the necessity of postponing the prospective major engagement on account of their

comparatively limited number had hindered the German fleet command in the execution of the aforesaid undertakings. In addition, only after the outbreak of the war did the necessity arise even more clearly, in view of the shortage of other appropriate vessels, to call on the torpedoboats to a very great extent for submarine attack and defense service.

There was not a sufficient number of submarines available for the specified plans of attack; in all probability, a loss of the detailed vessels consequently would have followed; in addition, the inadequacy of the British harbor defenses at that time was unknown to the Germans to the extent described here.

Even irrespective of the deficiencies of the harbor defenses, the building project of the northern bases compared with that of the channel ports was found to be only in the beginning stages at the outbreak of the war. Neither floating dry docks, work shops nor coaling-station equipment were ready. For coal supply, dependence was placed completely upon steamers, while for repairs, dependence was had solely upon both repair ships, the Cyclops and the Assistance. Since the situation always demanded a speedy coaling process, all vessels of the fleet upon entry had to coal simultaneously in order to proceed to sea again without delay, a requirement which extraordinarily increased the number of necessary colliers.

In the beginning the organization in no way responded to these demands. Furthermore, delays resulted from the insufficient number of colliers and from their unsuitable coaling arrangements which easily could have become fatal upon an offensive action by the enemy.⁽¹⁾ On the other hand, the organization of this base made the fleet very mobile. The base could be moved

(1) Rapidity of fueling was of vital importance to the Empire - Jellicoe "The Grand Fleet", Page 84.

on with comparative facility to any favorable point in case the strategic situation demanded it. At any rate, some time elapsed before the mutual cooperation of this mighty undertaking was assured through the development as regards the countless number of vessels required.

After communication was established between the repair ship Cyclops and the Admiralty by means of a cable to the town of Scapa, there was proposed on August 27th the further development of news dispatch service of the base by the erection of two other radio stations for local purposes, while a radio direction-finder station at Scapa, in addition to those already provided at other stations, would facilitate the locating of German vessels at sea through radio bearings.

Not only the removal of the Grand Fleet to the northern bases, but also the very war structure itself brought important improvements in place of any former organization. Before the war, the Home Fleet had consisted of First, Second and Third Fleets which comprised practically all vessels in home waters.

At the outbreak of the war, however, the British Admiralty, as Jellicoe maintains, divided the Home Fleet into two parts which consisted of the First or Grand Fleet, and the Second and Third or Channel Fleet. The details of the organization are to be found in Table 31. In addition to the regular units of the First Fleet, there belonged to the Grand Fleet in the beginning, several other constituent parts most important of which ^{were} the Destroyer Flotillas I and III stationed at Harwich whose wide separation from the Fleet was explained above all on account of the inadequacy of the northern bases for the reception of a larger number of destroyers. In spite of this separation, they were then placed unreservedly under the Grand Fleet in order to work with it in close strategic co-operation. The same applied to the submarines at Harwich. But inasmuch as the execution for this purpose soon appeared too difficult, the latter, already on August 9th, were placed unre-

servedly under the Admiralty upon the order of the Commander-in-Chief. On the other hand, fighting units were withdrawn very soon from the 2nd and 3rd fleet for service with the Grand Fleet, namely, four ships of Battle Squadron VI, Cruiser Squadrons VI and X and likewise a Mine Laying Squadron consisting of seven old cruisers. The employment of these vessels with the Grand Fleet will be discussed in detail later on.

The Channel Fleet operated entirely independently of the Grand Fleet. It comprised the older battleships of the Battle Squadrons V, VI, and VII, in addition Cruiser Squadrons V and VII and likewise a flotilla of mine sweepers with torpedoboats. The vessels of the Channel Fleet of Battle Squadrons V and VI, likewise Cruiser Squadron V, had only skeleton crews on board before the mobilization. Their degree of development was therefore of such nature that they still had to undergo a period of training at Portland prior to their usefulness for war purposes.

This applied in the greatest sense to the vessels of Battle Squadrons VII and VIII which, prior to the mobilization in general, were not manned and for that reason were inducted into an intensive training period at Plymouth. In consequence of this Battle Squadrons VII and VIII joined the Channel Fleet only on September 3rd. On the other hand Cruiser Squadron VII already took part during the transportation of the expeditionary force to the continent in maintaining guard of the Dover Straits. Irrespective of the description of arrangement of the Grand Fleet and the Channel Fleet, the aforesaid war organization of the British battle forces differed in the main only in unessential points from the previous orders of the Admiralty.⁽¹⁾ Such deviations are amongst others; the separation of Destroyer Flotillas I and III from the Grand Fleet, the establishment of a special "Shetland Patrol Force" consisting of the "Forward" and

(1) See Chapter I and Table II.

four destroyers of the River type, the assignment of the cruisers "Endymion" and "Theseus" from Cruiser Squadron XI to X, and several other secondary details.

Deployment, bases and war organization, as a matter of fact, constitute the strategic foundation for the intended employment of the British naval forces.

The strategic tasks of the Grand Fleet at the outbreak of
(1)
the war according to Jellicoe's plan, were to be observed somewhat as follows:

1. Security of unlimited trans-oceanic communication for British vessels; necessities of life for an insular populace which, above all, was unable to subsist itself from its own resources.
2. Permanent economic pressure against the enemy through curtailment of his over-seas Communications in order to force peace upon him as a consequence.
3. Protection and support of all of own troop transports and protection of their lines of communication and supply.
4. Safe-guarding the country and the dominions against invasion by hostile forces.

To be sure, according to the plans of Jellicoe these tasks would be accomplished the quickest and safest way by the destruction of the hostile fleet, although history has shown, that it is a very difficult matter to force the weaker opponent into battle. The latter usually avoids such a battle and keeps back the most valuable fighting forces - the battle fleet - within the limits of fortified harbors, thereby resulting in a continuous threat to the over-seas communications of the stronger naval power. On account of such a situation the latter would be forced into a protracted state of preparedness in order to be able to face the enemy in battle at any moment in event of escape.
(1) Compare with the probable operation order in Chapter 3. ---

According to the methods of the Napoleonic era, they would have attempted to accomplish this purpose through the placing of their own fleets unreservedly opposite the enemy's ports, methods, which, no longer however, would now be applicable in view of the incalculable working significance of the submarines and torpedo-boat, and also to a certain extent of mines against that type of a blockading fleet. Consequently, even before the war, it became necessary to decide upon the distant blockade in spite of the disadvantages which might arise out of a greatly increased spread of ocean to be patrolled; obstacles which might be evident without further comment, when one realizes that the North Sea comprises an area of no less than 120,000 square miles, and that hostile ships which might try to penetrate any scouting line could be sighted on an average of a distance of only eight to nine miles on clear days, and on dark nights barely more than a quarter of a mile. The narrowest place for such a line of patrol was to be found between the Shetland Islands and Norway, yet even at this point the distance still would be 160 miles to which would still have to be added 40 miles of the Fair Island Channel. (See Chart 6)

A review of all those circumstances had caused the Admiralty to establish Scapa Flow in the Orkneys as the main base for the fleet from which point the Grand Fleet would have to maintain a watch of the North Sea, while the Second and Third Fleets would have to protect the channel. The enemy fleet would have to be held within this area of confinement. For the fulfillment of this undertaking the First Fleet, according to the occasion, would have to take up a covering position and a state of readiness in the North Sea from which the strategic co-operation with the cruiser squadrons might be possible. From this point, under the protection of capital ships, they were to search the North Sea in a southerly direction for enemy ships, and thereby to strive for points of vantage by which it would become possible

to force the German High Seas Fleet into action in case the latter
(1)
should proceed to sea.

To accomplish this end, dependence would nevertheless be placed upon permanently fixed advance lines of patrol. Although the latter had never actually been tested by experience in maneuvers, yet they might very easily be penetrated unnoticed during the extensive and irregular burdensome conditions of visibility of the North Sea, and above all they might be exposed too much not only to submarine attacks but even to surprise attacks by superior forces.

Even though the English order of operations, according to this concept, in no way prescribed avoiding battle under any circumstances, yet the British naval authorities insisted right in the beginning to yield to the opponent as little opportunity as possible for an attack. The British High Command, therefore, in conjunction with the distant blockade, instead of permanently fixed outlying advance lines, furnished alternating scouting expeditions of cruiser squadrons in the entire area of the North Sea in their place, being a system by which it must have appeared very difficult to the blockaded enemy, by the appearance of battle forces at favorite places in the North Sea, to form conclusions on the latter's further purposes and to establish any further projects. An encounter in this way was more or less left to fate, the particular battle resting with the initiative of the German Fleet. The attack was expected from the latter. On account of this situation, however, the Grand Fleet had to

- (1) "To effect this purpose it was intended that the main battle fleet should occupy, as circumstances permitted, a strategic position in the North Sea where it would act in support of cruiser squadrons carrying out sweeps to the southward in search of enemy vessels, and would be favorably placed for bringing the High Seas Fleet to action should it put to sea." Jellicoe, The Grand Fleet, Page 15.

of which a prolonged state of preparedness of the Grand Fleet at sea became unavoidable through the strategic defense adopted.

In contrast to the German High Seas Forces, the Grand Fleet already had gone to sea on August 4th at 9:30 A.M., even before the announcement of the state of war, for the purpose of taking up a distant blockade, after the false report of the previous evening that three German transports had passed the Great Belt on the evening of August 1st; also Battle Cruiser Squadron I and Cruiser Squadron III, likewise the armored cruisers COCHRANE and ACHILLES already had taken their observation positions south of Fair Island.

The movements in detail can be seen on Chart 32. The reason that the patrol line was established so far north near the Shetland Islands on August 3rd and 4th was accounted for by the fact that by doing so, the narrowest point of the exit of the North Sea was closed once for all and that at that place in the greatest probability it was still hoped to intercept German vessels which perhaps in expectation of the definite declaration of war had two days previously left their home ports in order to break through to the Atlantic Ocean in time. Therefore, on August 5th, there already was distinctly recognized a definitely organized zone of patrol maintained by a continuous state of patrolling considerably further to the south somewhat in the direction of Hauge Sound toward the Firth of Forth which had its support in the immediate protection of the main body. Toward noon time the German auxiliary cruiser Kaiser Wilhelm der Grosse proceeded along the same line of direction. She intercepted numerous radio messages in open language from British cruisers, which became intensified during the latter's continued advance to within about thirty or forty miles of the Norwegian territorial waters toward the north which lasted until 4 PM when the signals became indistinct. At 6 PM when the course to Iceland was followed, the

messages again became louder so that the Kaiser ^{ilhelm} der Grosse now believed ^{self} to be pursued and assumed ^{an} occupation of the line from the Faroes to Iceland by British cruisers. In spite of the fact that all available British fighting forces were in the same area on this day, the first break in the blockade had been completely successful. The difficulty and the effectiveness workability of the distant blockade in these spacious sea areas were thereby clearly demonstrated.

But right in the beginning other weaknesses of this blockade system also made themselves noticeable, for even on the first day a continuous coming and going of the battle forces for fueling purposes took place, so that sometimes a battle squadron, sometimes the battle cruiser squadron, but always a torpedo-boat flotilla and a number of the cruisers were not on hand. Under this difficulty, without doubt, military possibilities of consequence might have favored the German fleet, provided that unrestricted freedom of operation might have been possible and provided that complete participation had been yielded to it, though far removed from the bases.

After the news of the declaration of war against Germany, the first reports about the enemy were announced in the Grand Fleet about midnight of August 4th to 5th. To be sure they were nearly all unreliable, but the uncertainty of the dispatches however on the British side was rather seriously considered. So it was announced among other things that two German cruisers had passed Drontheim on a northerly course, that four torpedo-boats had been seen at the northwest end of the Shetland Islands, that the German passenger steamer Kronprinzessin Cecilie had passed Stronsay Firth in the Orkneys on an easterly course during the night of the 5th to the 6th, and finally that a German base for operations had been set up on the Norwegian coast at latitude 62 degrees north. Reports of the latter kind were numerous,

especially in the early days of the war, but confirmations through cruisers on the scene always yielded the fallacy of the news dispatches which doubtless at one time had to be explained through the normally intensive gathering of German merchant vessels in those neutral waters, yet too, they owed their origin to the former frequent visits of Norwegian harbors by German war vessels in previous years.

On the forenoon of August 7th the greatest part of the battle ships, followed by Cruiser Squadron II and Light Cruiser Squadron I had to go to Osapa for the replenishment of the fuel supply, so that on this day the blockade was maintained solely by Cruiser Squadron III together with Flotilla II and could be protected only by Battle Cruiser Squadron I and Battle Squadron III. The patrol confined itself therefore to the further search for German bases on the Norwegian coast, then the cruiser squadrons returned also.

In the meantime the battle fleet had completed coaling operations and proceeded to sea even as early as 7:30 PM of the same day. This time, nevertheless, it availed itself of the west passage of Pentland Firth as a point of exit, guarded by Flotilla IV against submarines until the advent of darkness. On August the 8th the battle ships took a position southeast of Fair Island engaged in fire control drills while several ships were occupied in target practice, when at 10:30 AM it was reported by one of the latter, the battleship *Ignarch*, that a torpedo had been fired by a submarine against that vessel. This was the signal for the immediate cessation of the exercises as the vessels were assembled, while half of Flotilla II received orders to pursue the submarine. At 7:30 PM another periscope was seen by the watch officer of the *Iron Duke*, so that he changed his course in order to ram it, when shortly afterwards the same periscope was reported by the *Dreadnaught*, but later on it was not

seen anymore. A further, and this time an indubitable encounter with a German submarine occurred on the following morning. On the 9th of August toward 5 AM the light cruiser Birmingham of Light Cruiser Squadron I, acting as a screen ahead of the fleet, suddenly sighted the German submarine U-15, on the surface. She succeeded in ramming and destroying the submarine; the area of the catastrophe, being marked by the strong odor of petroleum and by rising air bubbles, was soon thereafter passed by the fleet and reported by the battleship ORION. According to facts just made known by the appearance of Jellicoe's book, the ten German submarines which had gone forth on the 6th of August from Heligoland for an attack against the enemy fleet had actually succeeded in making contact with the latter without the former having become aware of this fact and without knowledge of the herein entailed loss of U-15. (Chart 9) However, the loss of U-13 remains completely shrouded in mystery, even though after all it is not to be excluded that the alleged attack upon MOX-ARCH or IRON DUEL on the preceding day is traceable to this vessel nevertheless a substantiation of this suspicion is possible only, after the position of the British ships over this period of time becomes completely known. (See Chart 3')

The success of BIRMINGHAM was hailed with great satisfaction in the British fleet as it was held fitting at least in part to offset the sweeping surprise and excitement which the appearance of the newly dreaded weapon so far distant from its bases must have provoked without fail. It is true the fleet of dreadnaughts remained in the same area until after noontime in spite of possible danger, yet by means of continuous zig-zag courses it made further attacks difficult. Unfortunately, in the meantime the German submarines without knowledge of the immediate proximity of the enemy main body had continued their return home,

according to plan. The Admiralty, on account of the appearance of the submarines, showed itself essentially more disturbed than the commander of the fleet. Upon the Admiralty's instructions the fleet of dreadnaughts on the morning of August 10th withdrew for that reason in a far northerly direction to the area west of the Orkneys and Shetlands, while Cruiser Squadrons II and III and Light Cruiser Squadron I were dispatched together with Flotilla IV to the Norwegian coast in order to search it for enemy submarine bases suspected of being there. Without such investigation from the British point of view no plausible explanation could be established for the appearance of German submarines so far removed from Heligoland. The armored cruiser DRUE was sent to the Faroe Islands for the same purpose to be re-inforced later by two vessels of Cruiser Squadron X. Finally, on the same day, in order to be in cable communication with the Admiralty the commander of the fleet returned to Scapa, well informed of these events, for discussion of further measures which would bear weight upon the newly created situation.

As a matter of fact German submarine bases on the Norwegian coast were not present, in consequence of which the mission of the cruisers thither remained unsuccessful, nevertheless Commodore Goodenough could not forego entering Stavanger on his cruiser, SOUTHAMPTON, in order to convince himself personally of the loyalty of the Norwegian authorities and of the groundlessness of the British suspicions. As a result, the German submarine advance, in spite of the fact that damage to the enemy main body was unsuccessful, nevertheless had a very important strategic significance. The appearance of the submarines in British blockade areas alone had already sufficed to force the British dreadnaughts out of the North Sea at least periodically and to occasion the advance of the cruiser squadrons toward the

Norwegian coast, thus giving up their blockade positions, so that on the 10th of August the exit to the Atlantic Ocean from the North Sea was open. For this reason it was futile to speak of an effective blockade on this day, for only on the 11th of August was the gap which had ensued further to the north successfully closed by means of Cruiser Squadron X consisting of eight cruisers of the very obsolete EDGAR class. Unfortunately, these effects of the submarine advance remained completely unknown to the German Fleet Command. Even the German merchant shipping could derive no benefit from this, since its ships nearly as a whole had sought the nearest harbors offering security in conformity with recognized procedure in event of war.

On the return of the cruiser squadrons and destroyers from the Norwegian coast to Scapa and Cromarty for coaling purposes, Cruiser Squadron II then headed far to the South. For the first time since the outbreak of the war there again appeared from the north a force of the Grand Fleet at the latitude of the Firth of Forth, yet it still remained 200 miles distant from the German bases. On the whole, the first week of the war is characterized by the withdrawal of the British dreadnaughts from the North Sea to the Atlantic Ocean. There, west of the Orkneys, the battle squadrons now held tactical exercises and target practice, and on August 15th, with the exception of Squadron III, they entered Scapa Flow for replenishment of fuel. The fears which the appearance of German submarines had aroused, nevertheless reached such an extent that it was believed that Scapa itself probably could not be held any longer against the encroachment of the submarines. For this purpose a new base, Loch Ewe, even though situated on the west coast of Scotland, was to be tried. Therefore, Battle Squadron III was dispatched there, although in so doing, the wide separation of the squadron from the Grand Fleet of not less than 120 miles had to be taken into consideration.

The knowledge of such an arrangement would have been invaluable to the German Fleet and the War Command for a more favorable estimate of the strategic situation. This information, was not available at that time and even the meager reports which were received usually arrived so late that in the meantime by the very nature of the situation of the rapid mobility of the battle forces, the strategic situation again must have changed completely. The insular state of isolation of the islands of the United Kingdom presented extraordinary difficulties to the German intelligence service.

In the meantime the battle cruisers immediately went to sea again on August 12th after completion of coaling operations and on the following day proceeded under greatest fuel restrictions to the west of the Orkneys while at the same time Cruiser Squadrons X and III took up positions in the North Sea, the latter in fact in a south-easterly direction from Aberdeen.

At this time likewise, only meager dispatches concerning the German Fleet were available for the British Admiralty. The only news of greatest certainty was furnished by a neutral steamer which in the interim had arrived in England from Hamburg. Her captain maintained to have sighted on August 9th, opposite Cuxhaven, fourteen enemy battle ships, together with several mine layers and likewise possibly thirty torpedo boats between Cuxhaven and Heligoland. A mine field of large size had been planted off the Jade. Further scouting and at the same time protection against German attacks on troop transport in the Channel could be accomplished only by the British making an advance into the region of the German Bight. One thing, however, was to be considered for such an extensive undertaking. Even at the end of July 1914 the Admiralty had received the information from a very reliable source that a widely extended mine offensive in British waters was intended by the Germans in case of war and even the exact location of many of the proposed mine fields

became known. Granted that these accounts tallied, they became aware of the likelihood that the enemy without consideration for British or neutral commerce was going to plant mines even in the open sea especially quite naturally along the approaches from the northern bases to the German Bight. The undertaking of the König in Louise appeared to confirm this suspicion. From this point on, therefore, certain disadvantages of the distant blockade already became perceptible because the southern part of the North Sea had been yielded without a struggle to the enemy right in the beginning and for that reason no guarantee could any longer be assumed against the absence of mines in those waters. In the southern part of the North Sea the British fleet furthermore felt itself threatened by invisible and unknown dangers and as a matter of fact was no longer mistress of the situation. Therefore, extraordinary precautions were maintained, all the more so, for the advance in that direction; for according to the viewpoint of the British Commander-in-Chief the loss or damage of even a few dreadnaughts might have broken the balance of naval power and thereby on account of the dependability of the British Isles upon naval power could endanger the whole situation.

He therefore decided to permit the six converted mine sweeping gun boats to precede the fleet in its advance toward the South although in so doing the rate of speed of all vessels was reduced to about ten knots and as a result the danger of successful submarine attacks on the column was greatly augmented; yet on the other hand even by this measure a complete security against a mine explosion was not to be expected on account of the limited number of mine sweepers. As a further alternative there still remained a possibility to let the older and least valuable vessels precede the squadrons as obstruction breakers that in event of making contact with a mine that at least the dreadnaughts would be preserved against damage by mines at the expense of the oldest vessels. For this purpose Battle Squadron VI had already been

withdrawn from the Channel fleet to Scapa on August 8th and was
(1)
to participate in the next advance. The advance commenced
on August 13th at 7:30 PM after the completion of coaling opera-
tions at Scapa, yet two battleships could follow only later on,
because they had not yet completed fueling on account of the
shortage in numbers of colliers. Later on the battleship Ajax
had to be ordered back because one ^{turret} was not ready for battle.

The vessels then departed from Scapa toward the west. On
the following day target practice was held and then all the
battleships and battle cruisers assembled before 3 PM about 40
miles northwest of the Orkneys and from there they commenced the
advance toward the North Sea. The afternoon was spent in
battle exercises especially for the development of the column
for battle from cruising formation. At midnight the battle fleet
passed through Fair Island Channel and on August 16th at 4 PM
it joined Cruiser Squadrons II and III and likewise Light Cruiser
Squadron I. At 5 PM Flotillas II and IV and at 7 PM the mine
sweepers and four vessels of Cruiser Squadron X joined the fleet.
Then commenced the systematic reconnoitering in a south easterly
direction toward the German coast, the battle cruisers about
forty or fifty miles ahead of the main body. Simultaneously
Cruiser Squadron VII and Torpedo-boat Flotillas I and III were
under way from Harwich in concentric fashion ostensibly for the
purpose either to join the Grand Fleet for day battle or to at-
tack the German battle forces at night on their return from
the north to the waters of Heligoland. Besides, two British
submarines already had instructions to take position on August
16th at 7 AM at the Ems and Jade River, respectively, in order
to report promptly and to attack any possible outgoing German
battle forces. The carefully conducted undertaking of the
northern battle forces already came to a close however at the
latitude of Horns Reef, without the sighting of any German vessel.
(1) Squadron VI was therefore very soon termed in the fleet,
"Mine-bumping Squadron".

There at 10:30 AM, still one hundred miles from Heligoland, the return was already undertaken, probably in order to be out of range of the German torpedoboats in time before darkness. In view of this, the possibility of contacts with German forces was not offered. The only major advance of the Grand Fleet during the first month of the war, therefore, passed without result. (See Chart 34).

During the turn-about the battle cruiser H.M.S. KENNEL falsely reported an enemy submarine and thereby caused the fleet to pursue a zig-zag course on its return. Later on the cruiser squadrons deployed themselves preceding the battle fleet in a scouting line of not less than one hundred and fifty miles, on the east wing of which Cruiser Squadron II and Battle Cruiser Squadron I headed for the Norwegian coast at Lister and then from that point bearing back straight across the North Sea to steer for Linnaird Head. To the west of these battle forces but not steaming so far to the north followed Cruiser Squadron III with Battle Squadron III while Light Cruiser Squadron II at first acted as rear guard protection and then at night time, relieved by Flotillas II and IV, constituted the vanguard of the main body, while the mine sweepers which had taken up the sweeping apparatus on the return were used by the squadrons for submarine protection. In the meantime Cruiser Squadron X fell in with the battle cruisers. During the night, Cruiser Squadron II was sent to Cromarty and the X to Scapa for coaling purposes, where also Battle Squadrons III and IV, Flotilla II and the mine sweepers followed. The remainder of the fleet remained on a northerly course. At daybreak it picked up the battle cruisers and at midnight again found itself in Fair Island Channel in order this time not to go to Scapa but to enter Loch Ewe with all its vessels on the afternoon of August 18th. In the meantime Cruiser Squadron II at the conclusion of its scouting expedition had taken up an advanced position in the North Sea opposite Pentland Firth,

while Cruiser Squadron X, after coaling, again took over its customary position of blockade between the Shetland Islands and Norway. The particular importance of an effective blockade at this point was emphatically stressed by the Admiralty and a reinforcement of four armed merchantmen was dispatched there.

Simultaneous with the British fleet advance there were only three German submarines at sea for operations against the enemy. Then again as on the previous occasion, one of these boats succeeded in approaching the enemy main body, but this time, too, the opportunity of fixing the fleet's position by the German boats was futile. In consequence of this, the German Fleet Command again remained without knowledge of the movements of the British battle forces and particularly it did not learn that the enemy fleet had remained off Heligoland by not more than one hundred miles thus establishing a certain possibility of a German attack even though over only a very limited period of time.

It will be recalled that U-20 and U-21 had departed on the afternoon of August 15th from Heligoland for the north (Chart 11), and that U-20 on August 16th at 4 AM had located a cruiser and a torpedo boat in the latitude of Limfjord, an observation which may have been correct because the British main fleet at the same time was 120 miles to the westward. This distance was reduced on the ensuing day to 90 miles without more than one destroyer of the British battle forces being sighted, nevertheless this contact sufficed to arouse in the mind of the commanding officer of the submarine the doubtless erroneous idea of a systematic pursuit, for the submarine was neither sighted nor reported by the British. Even to the same degree did the observations of the submarine on August 18th appear to have substantiated the facts concerning the further pursuit by enemy destroyers.

Reproduced from
best available copy.

The other submarine, U-21, commanded by Lieutenant Commander Hersing, approached the enemy substantially closer, as she had commenced her journey on August 17th along the baseline of Ogersund and Kinnaird Head. At that point at 7 A.M. she accidentally had been barely more than 40 miles distant from the British battle squadrons. The courses then diverged as the British fleet headed for Fair Island Channel and U-21 on the contrary steered for Moray Firth situated to the south because the main base of the British fleet was sought at the latter place and not in the Orkneys. In view of this U-21 too, was not allowed to discover and to attack the British fleet at sea. When the submarine arrived off Moray Firth on August 18th, Cruiser Squadron III had already arrived there, while the other battle forces went to Scapa and to Loch Ewe, so that even during her stay off Moray Firth and the Firth of Forth no more opportunities for attack were offered. The U-22 experienced the same failure on August 17th and 18th off the Humber. Inasmuch as the battle forces which returned from the German waters did not enter this harbor, but arrived at Harwich. The possibility to be able to alternate the bases and to have at disposal several others at various places on the coast established itself as an extraordinary advantage to the British fleet in spite of the otherwise complicated difficulties of the floating base.

On the whole, however, the limited success of this submarine reconnaissance could not be viewed with surprise due to the insufficient number of forces employed; still less, therefore, were justified such far-reaching conclusions as the High Command actually deduced from it. From the outcome it believed to have established that "The British main body^{and} probably all war ships which were liable to submarine attacks, were assembled at such a distance from the German coast that the searching for these battle forces surpassed the technical capability of the submarine:

and "that the British battle fleet avoided the North Sea completely and held itself far out of reach of our forces."

These deductions, however, were not applicable to the third cruise of the British fleet.

On August 20th at 7:30 PM the battle fleet already had proceeded to sea with the exception of ORION which had to be left behind on account of severe condenser trouble. On August 21st it remained to the west of the Orkneys for target practice and early on the morning of the 22nd it proceeded again through Fair Island Channel to the North Sea. In the meantime in consequence of the taxation from the continuous cruising, as well as due to the necessity of maintaining the medium caliber guns continuously manned, even during the day, on account of submarine dangers, the number of the crew of the ships showed itself to be insufficient in firemen and gunners. Consequently, a reinforcement in the fleet of about 2000 men from the reserves took place, a measure, which from the German view point, had already been provided as a precaution during mobilization.

Light Cruiser Squadron I proceeded into Fair Island Channel and in the afternoon Destroyer Flotilla II also joined the fleet, the flotilla to undertake protection against submarines during the further advance. Battle Cruiser Squadron I, weakened by the absence of the New Zealand which had proceeded to the Humber in order to join the Invincible there, was delayed on August 21st at Scapa on account of fog. Thus it carried out target practice west of the Orkneys on August 22nd and finally appeared likewise 100 miles to the east of the Orkneys in order to take up at this point the support of Cruiser Squadrons III and VI which had resumed the blockade to the south of this position between Scotland and Norway. (See Chart 35).

From these positions Cruiser Squadrons II and VI, likewise the Light Cruiser Squadron I supported by the battle cruisers proceeded southward on the following day as far as latitude 56 somewhat on the line with Edinburgh. In so doing, Cruiser Squadron VI cover-

ing the eastern wing, was to reconnoitre the southern part of the Norwegian coast and together with an armed auxiliary cruiser to capture German merchantmen which might attempt to leave the territorial waters of Norway somewhere in the vicinity of the promontory of Jaderen. Fantastic suspicions concerning a German base of operations for airships on the island of North Rona west of the Orkneys occasioned the dispatching immediately to that place of the cruiser Sappho which very soon proved the unsoundness of this report and the unsuitability of the location for such a purpose. At any rate the reports concerning the alleged sightings of hostile aeroplanes and airships which on closer examination were proved false, were apparently at least as numerous on the British as on the German side at the commencement of the war.

Moreover, the battle fleet, with the exception of Squadron III which was ordered to Scapa for coaling, remained at sea for the support of the cruiser squadrons, although only one half of Flotilla II was available for submarine protection while the other half pursued a supposedly sighted submarine to the east of the Orkneys. The fear from submarine attacks therefore was very acute aboard the battleships; on August 23rd the fleet also was disturbed many times through erroneous submarine alarms, but as a matter of fact there were at this time no German submarines in those waters.

On August 24th Battle Squadron I and Light Cruiser Squadron I also had to be relieved for coaling purposes to go to Scapa, the latter, however, arriving only after the relieving by Cruiser Squadron III. On the whole the cruisers continued to maintain the patrol service. On August 25th there followed the relieving by Battle Squadron III of Battle Cruiser Squadron I for the same purpose; then the remainder of the battle fleet with the battle cruisers also returned to Scapa where the vessels arrived at 8:30

All on the 26th, here likewise being hindered by the fog as at the time of its departure. On this day, therefore, the reserve of the cruiser line was formed again solely of one squadron and that of older battleships. IROI DUEI, Battle Squadrons II and VI and Flotilla II lay at Scapa, although the battle cruisers immediately after cooling departed again from the base in order to join Squadron III. Toward evening the cruiser squadrons then also left their position of blockade, Cruiser Squadrons X and VI going to Scapa and the II arrived at Rosyth.

Accordingly considerable numbers of the Grand Fleet had been at sea almost incessantly from August 21st to 26th. As a result it must have occasioned a certain amount of disappointment to the Commander-in-Chief that in spite of this fact, German vessels had found opportunity during this time to plant mines off the Humber and Tyne. As has been learned from previous description, the aforementioned German forces during their undertakings on August 25th and 26th had crossed the North Sea back and forth without coming in contact with a single British ship (Charts 15 to 17). This very startling fact of that time is now explained by virtue of the fact that the British cruiser squadrons in those days had not gone southward across the 56th degree of latitude and consequently they had yielded the southern part of the North Sea completely to the enemy. The German mine barriers now laid directly off the British bases of this area demonstrated the fact that such a conduct had not served a useless purpose to the Germans, nevertheless they in no way caused the British Fleet Command to make a change in its once accepted policy. However, in order to protect the coast, even though without the aid of the fleet, at least in some way against further excursions by the enemy, the Command of the Fleet proposed to the Admiralty that the flotillas of the coast defense patrol (patrol flotillas) be advanced further out to sea. In the further anxiety that such mining operations might also be directed against the

northerly bases of the fleet, the Fleet Command appealed for the delivery, at the very earliest, of twenty trawlers with drag nets and other mine sweeping devices for the constant searching of the waters around Pentland Firth, and likewise the speediest increase possible of numbers of other smaller and faster boats for the protection of the bases. It can be observed here that even in the British Navy in the beginning of the war a supply of light patrol boats was lacking.

Simultaneously, the Admiralty of its own accord had decided on steps for a British counter-offensive, inasmuch as it set August 28th for an operation against the German coast by the forces stationed at Harwich. Only on August 26th however, was the Commander-in-Chief of the Grand Fleet informed of this, notwithstanding that Light Cruiser Squadron I assigned to him was likewise to participate. That much which he heard of the undertaking caused him to make immediate urgent representations to the Admiralty, under no circumstances to let the operation go on without the aid of the battle cruisers and to dispatch them to the south while the Admiralty was requested to impart information to the leaders of the southern combat forces of the presence of this squadron on the German coast. According to the previously depicted issue of the battles of August 28th, it remains entirely certain that only this measure, on this day, had prevented a British failure. On the other hand by a strange coincidence a support of the battle cruisers by battleships was not considered necessary by the command of the fleet. After it had gone to sea on August 27th, the Grand Fleet maintained a position, even on August 28th, of over three hundred miles distant from the scene of battle without the possibility of being able to render assistance in case that the battle cruisers encountered superior opposition or that their speed was reduced by submarines and mine hits. Only the success at that time had justified the holding back of the British fleet, yet from the German point of

view entirely similar reasons were held appropriate under parallel conditions, namely, it was not desired to expose the valuable superdreadnaughts to the over-estimated strength then felt also by the British, of submarine attacks by day, or torpedo boat attacks by night or to simultaneous danger from mines.

Even on August 29th the fleet remained at sea in the customary way while the battle cruisers together with Light Cruiser Squadron I entered Scapa at 8 PM after a successfully fought battle. Likewise on this day Cruiser Squadron III went to Cronarty for coaling while on the whole the blockade formation was maintained opposite the Norwegian coast by Cruiser Squadron II and to the west of it by Cruiser Squadrons VI and X. At the same time these blockade lines were strengthened farther to the north by another line of armed merchantmen in order by this means to compel blockade breakers to pass by day through at least one of these lines even though they succeeded in penetrating the other line unobserved at night. This system was to be carried out regularly in time to come, as far as the available fighting forces for it sufficed. But in order to make the blockade still more effective and in particular to be able to guard better the easterly lane of approach to Pentland Firth the squadron of the mine layers consisting of seven old cruisers was annexed to the Grand Fleet for blockade service, particularly as the employment of these vessels for their own service was not yet contemplated. The mine layers took position to the east of the Orkneys in a particular area for reconnoitering, while commencing August 27th the armed merchant vessel Oceanic cruised to westward of the Fair Island Channel in order to maintain watch over the shipping in this area.

Only on August 30th did the fleet begin its return to Scapa where it arrived at 8 AM on the 31st. At any rate only Battle Squadron III remained at sea for the support of Cruiser Squadron II which cruised along the Norwegian coast until the 31st. On

the afternoon of the 31st Cruiser Squadron VI was withdrawn from the western blockade area, while the X remained there on duty.

On the 31st of August a further task was assigned to those vessels at sea. News had been received of the likelihood that further hostile mining operations, and this time certainly against Pentland and Foray Firths had to be reckoned with on the night of September 1. Therefore, it was attempted to cut off the hostile mine layers upon their return by means of the forces at sea. For this purpose Battle Cruiser Squadron I, Battle Squadron III and likewise Cruiser Squadrons III and X were available. Nevertheless the operation resulted in failure inasmuch as no mine layers had appeared. Thus came to conclusion the operations of the Grand Fleet during the first month of the war.

It is true the basic order of operations of the British Admiralty to the Grand Fleet had without doubt already indicated an attitude of restraint in all undertakings, nevertheless, the character of a complete strategic defensive was adopted only after the unexpected appearance of German submarines in northern waters and from the German mining offensive and from both these circumstances they formed the subsequent strategic deductions.

The radius of action of the German submarines and their endurance at sea had exceeded everything that could be expected within the former experiences of the British of the working possibilities of this weapon. The numerous sightings of enemy submarines in the immediate vicinity of the Orkneys and Shetlands led to the assumption that the enemy apparently held the middle portion of the North Sea continuously occupied with submarines. According to Admiral Jellicoe's deductions this indicated such a serious threat to the British superdreadnaughts that it was becoming a matter of important significance for the movements and operations of the British battle fleet. On account of the removal of Destroyer Flotillas I and III to Harwich, somewhat

over forty destroyers were at the disposal of the fleet itself, a number which just sufficed for the safety of the battle fleet and the battle cruisers against submarines. It must be realized that the fuel supply for the superdreadnaughts permitted them to remain at sea three to four times as long as the destroyers whose supply became exhausted by the end of the third day, so the only thing left for the big ships was either to return to port together with the destroyers, or to give up the submarine defense either in part or in whole if the blockade was to be maintained. In the early part of the war the latter method was decided upon, but in view of this, the vessels had to be kept back in the northern part of the North Sea so as to make the risk at all bearable, and at times it even became necessary to withdraw the fleet itself from the North Sea to the Atlantic Ocean and to base on Loch Ewe in the Irish Sea instead of Scapa.

A further danger which moved the British fleet command to this decision resulted from the active German mining offensive against the English coast. Regardless of how this might turn out, at least one would thus have to take for granted that the unoccupied part of the North Sea very soon would be littered with mines by the enemy at such places where they could become dangerous to the British Fleet without the enemy taking any consideration of the prevailing international law. In spite of this, should the British Fleet move into the mid and southern parts of the North Sea, then this could lead very soon to reduction in numbers of their own superdreadnaughts by mines and thus by an equalization of strength could lead to a German advantage. The sole protection against the mines could have been offered only by the mine sweepers which with their apparatus rigged out might have ridden steadily ahead of the fleet. But even if sufficiently suitable naval craft had been possessed for the purpose, which was not the case, the danger thus again arose that by their en-

ployment the combined reduction of the rate of speed to ten knots and the necessity of maintaining the fleet without zig-zagging on the best possible straight course behind the mine sweepers would have been favorable for hostile submarine attacks.

Submarine and mine dangers were the reasons which compelled the British Fleet to remain ordinarily in the northern part of the North Sea where the risk of going without submarine protection could be bargained with better and where on account of the greater depth of water and distance from the German bases enemy mining operations could be detected, before they exposed valuable ships to jeopardy.

Such a holding back of the large and valuable ships had as an outcome, as was many times to be expected, that the naval war in the North Sea did not result in major and decisive battles but on the whole was conducted and further characterized by mine, submarine and cruiser operations and at any rate by those means in minor engagements. Even during these undertakings only comparatively seldom did it come to the point of conflict, because on the British side itself, the cruisers for which a protection against submarines by destroyers could not be relied on on account of scarcity of ships, were held back excepting for convenient raids into northern waters. However, a lasting and a highly tense state of battle preparedness was the characteristic of the strategic situation in spite of this utter uneventful state, yet it was surmised from the British point of view to have to reckon at any time with an open attack from the German Fleet should it be against channel troop transports, or should it be against the English east coast. The holding back of the battle fleet in northern waters appeared exactly suitable to encourage the enemy for operations of that kind, in particular, if the enemy would possibly be able to choose the special favorable moment, when the fleet or at least her destroyer flotillas re-

turned to the bases for the purpose of replenishment with fuel and as a result would not be immediately available for action. To diminish this danger as much as possible, it was the everlasting concern of the Commander-in-Chief to keep his fleet at sea at least during the main troop transport movements. In the early part of the war it was found very difficult to be able to obtain timely information of the departure of German forces from the German coast., For lack of a close blockade of the German coast by surface forces, the timely recognition and reporting of a German advance devolved upon submarine outposts, but these were not yet in position at that time on account of inadequate radio equipment to permit their reports to the High Command to be timely and immediate. The maintenance of a submarine watch against the deploying of enemy fighting forces at night was demonstrated as wholly impracticable.

These statements are taken from Jellicoe's book and they describe clearly how the British strategy, restricted right in the beginning, was changed over very soon to a complete defensive through German pressure. Consequently, there was dispelled right at the outset the most important supposition of the German operation order namely, of damaging forces patrolling and blockading the German Bight and so in this manner to bring about an equality of fighting strength prior to the main battle. These efforts on the contrary in order to fulfill this hypothesis through the executed mine and submarine operations, had exactly the opposite effect inasmuch as the British battle forces thereby had been forced back even further from the German bases. By virtue of the restricted measure of these operations, they were not calculated to cause the enemy to change his strategy and institute a tighter blockade of the German coast. Opportunity arose for one day only on August 16th without knowledge to the Germans to engage in an attack upon British battle forces at not too great a distance from Heligoland. On this day, however, the High Seas

07/27/00
Fleet was not at sea. Even if this had been the case, however, an encounter in the extensive sea area between Horns Reef and Terschelling would still have depended upon accident. That all depended upon the movements of both fleets in the wide spaces of the sea at a time when the reconnoitering by air ships and air planes still found itself in its early stages. In view of the facts it is difficult to determine if frequent advances of the German Fleet as far as the mid portion of the North Sea would have influenced the conduct of the opponent more than the minor engagements already described, in the sense desired by the Germans. It is to be regretted, however, that attempts in this direction had also failed, although no certainty existed at that time concerning the high degree of the British withdrawal.

This circumstance is to be as little attributed to lack of individual valor as to the defensive attitude of the British Fleet; furthermore, the overestimation of the submarine danger was primarily sufficient to govern not only the German fleet commander but also his opponent. Without doubt the prospects of the British submarines for making an attack in the German Bight were certainly more favorable than for the German submarines located in the open expanse of the sea and separated from their own bases by the expansive ocean between Norway and Scotland. Under these circumstances the (German) Commander-in-Chief, prior to the main engagement which he expected definitely at the given time, did not desire to expose even one battleship to the danger of torpedoes from enemy submarines in order to maintain all his forces intact for the inevitable battle.

Irrespective of the great damage to morale, the German procedure, however, resulted in giving up at the start any possibility of coming to blows ^{with the enemy,} provided the latter did not attack the German coast directly. Of course, had such possibilities

been made way for through extensive naval penetration by the German High Seas Fleet, then, instead of the striving for the equality of strength through the destruction of detached enemy forces, the decisive battle against the entire superior British force while in closed formation, in the mid or southern part of the North Sea, could have developed very soon as a consequence. But even this situation still lay within the given confines of the German operation order namely: only to be able to force the enemy to battle in such proximity to the German Bight so that he would remain exposed to the attacks of German submarines during the day, and during the ensuing night to the attacks of German torpedo boats. As a result, the situation would have been fulfilled, for which the Operation Order prescribed the following: "If prior to this a favorable opportunity to engage offers itself, it should be taken advantage of." To bring about such an opportunity would have had to be accomplished with all available resources. The reason that the Command of the fleet did not succeed in this lay less in the restrictions which found their origin in the Operation Order than the state of extreme caution against the enemy and his intentions. This major restraint is to be regretted all the more, because no more doubt should have been entertained by the Fleet Command concerning the effect of its minor warfare carried on even after the first few weeks of the war with very limited means.

It is to be gathered from all this that the Operation Order no longer served the demands of the current circumstances as it, by the express sanction of the Chief of the Naval Staff, was interpreted by the Fleet Command. The unexpected major withdrawal of the British fighting forces always combined with her self evident retreat from German submarines in the southern and mid-portion of the North Sea, even though not fully grasped by the Germans, opened up to the German fleet a freedom of range in

maneuvering hardly to be expected and it was therefore to be put to a test how this situation was to be utilized. In consequence, on account of such a peculiar and mighty assemblage of fighting forces, there now arose a condition of a complete state of a strategic defensive of both parties due to such a surprising state of affairs. Encompassed too much in the perspective of the continental Napoleonic School which prescribed the quick and complete destruction of the enemy forces by the side numerically superior, the Germans confidently counted on an immediate large-scale offensive of the far superior British Fleet. Instead of this procedure there came to pass the return of the conduct of British naval warfare by means of the maneuvering tactics of the "pre-Nelsonian" (Vornelsonian) which avoided decisions by battle as much as possible, which allowed the enemy to prescribe the law of action. Therefore, while very early in the war the struggle ashore was raging between life and death which took on all the appearance of war in its absolute form, it had set in at sea with hostilities which barely surpassed the degree of petty warfare, a situation the continuance of which could only be agreeable to the British naval command. In case she could succeed in preventing the enemy from attacking, not only by reason of her numerical superiority strengthened by an unparalleled favorable geographical situation but also by reason of maintaining a state of threat of its possible capabilities through the intactness of the fleet, she would then accomplish a procedure of useful application which had always been traceable to the British skill for naval warfare and which as early as 1690, before the Battle of Beachy Head, had been designated "The fleet in being", by Admiral Herbert.

An entirely different situation however confronted the German Fleet. Here the authorities responsible for the use of the fleet, in spite of all numerical inferiority and insufficient geographically suited bases for a successful conduct of naval warfare,

must anew consider the question so important in the case of every strategic defensive. Where may I strike without risking too much, and where and when must I strike even at the risk of being annihilated? In the further development of the history of the naval war in the North Sea we will recognize what serious consequences the limitations of the operation order for the time of unrestricted employment of the High Seas Fleet was yet to have.

VOLUME I

Appendices

Note: Appendices 1-13 inc. bound in Part I; Appendices 14-21, in Part II.

1. War Order No. 1 for Squadron III, 4 August, 1914.
2. Operation Order No. 1 for Submarine Flotilla I, 5 August, 1914
3. Orders for the offensive of Submarine Half-Flotilla 3, 8 August, 1914.
4. Extract from War Orders of Submarine Flotilla II, pertinent to Orders for the Offensive of Submarine Half-Flotilla 3, 8 August, 1914.
5. Orders for U-20 and U-21, Operation to the North, 15 August, 1914.
6. Orders for ROSTOCK, STRASSBURG, Torpedo-Boat Flotilla VI, 21 August, 1914.
7. Operation Order No. 2 for Submarine Flotilla I, 21 August, 1914.
8. Order for Special Operation of STUTTGART, ALBATROSS, and Torpedo-Boat Half-Flotilla II, 22 August, 1914.
9. Mine Field Report of S.M.S. ALBATROSS, 26 August, 1914.
10. Mine Field Report of S.M.S. NAUTILUS, 26 August, 1914.
11. Operation Order for the Baltic Sea Theater of War, 30 July 1914.
12. (a) Notice regarding retention of French merchant ships in Germany at the outbreak of war (Declaration of war on France, 3 August, 1914).
(b) Order in Council of 4 August, 1914 covering the disposition of enemy merchant ships at the outbreak of hostilities.
(c) French Decree of 4 August, 1914 concerning the disposition of enemy merchant ships at the outbreak of hostilities.
(d) Notice from the "London Gazette" for 11 August, 1914 concerning the disposition of enemy merchant ships at the outbreak of hostilities in Germany and in England.
13. Preparations by the British Navy for war against Germany during the years 1911 and 1912.
14. Order for the protection of the JADE and WESER by the Harbor Flotilla, 12 August, 1914.
15. Order for the protection of HELIGOLAND BAY, 10 August, 1914
16. Basic rules for the protection of the GERMAN BIGHT, 18 August, 1914.

NORTH SEA
Vol. I.

Appendices (cont'd)

17. Order for the operations of submarines upon the sudden approach of the enemy to HELIGOLAND, 25 August, 1914 (with chart, appendix) 17a.
18. Order for the guarding of the EMS, 18 August, 1914.
19. Radio order for protection of the GERMAN BIGHT, 26 August, 1914.
20. Extract from English Press - "Life in a German Warship".
21. Compilation of German Radio Messages, 28 August, 1914.

Commander of the Scouting Forces Wilhelmshaven, 12 Aug. 1914.

PROTECTION OF THE JADE AND WESER BY THE HARBOR FLOTILLA

Is at present regulated by the Commander of the Harbor Flotilla on the ARIADNE, as follows:-

1. Day:	.	2. Night:
Wangeroog channel - ZILTEN.	.	ZIETEN, 2 Torpedoboats.
Old Jade- ARIADNE, DRACHE.	.	3 Torpedoboats.
Weser- ALICE ROOSEVELT, 1	.	1 Torpedoboot, 5 armed fish-
armed fishing steamer in the	.	ing steamers in the line buoy
line buoy E East (mag.).	.	E. East (mag.) (6 P.M. to 6 A.M.).
Weser channel- NIOBE.	.	ARIADNE, behind her NIOBE.

Fishing steamers will show as recognition signal two red lanterns together.

Sig: HIPPER,
Rear Admiral and
Commander Scouting Forces.

To:- Fleet, I; II; III; Squadrons, I; II; III;
Torpedoboot Flotillas, Minesweeping Divisions;
I, II, III, IV, V, VI, VII, VIII.
All Admirals, Cruisers, Hamburg, Stettin;
I and II Submarine Flotillas.

NAVAL B.W. VOL. I

APPENDIX 15

The Commander of the Scouting Forces.

Wilhelmshaven, 10 August 1914.

Order for the Protection of Heligoland Bay.

1. On the 10th of August on the west breakwater, and on the 12th of August on the east breakwater of the submarine haven at Heligoland there will be four 10.5 cm R.F.s each ready for action. Two 8.8 cm R.F.s will be so placed in the highland that they command the north harbor.
2. A cruiser will be assigned for the defense of the harbor by night at the wish of the commandant until further notice.
3. The cruiser will anchor suitably in full readiness behind the sand hills. It can from here cover the north harbor and the passage from the submarine harbor, will not hinder the fire of the light artillery from Heligoland, and the same time can, according to demand, rush out and fall upon an attacking enemy.
4. The station for the protection of Heligoland Bay must be occupied right at twilight by the cruiser designated for it, thereby the garrison of Heligoland will be able to obtain information regarding the disposition of own forces before dark.
5. The position is to be left for the day position immediately after dawn.

Signed:

Hipper
Rear Admiral and Commander
of the Scouting Forces.

Copies to:

All admirals and cruisers of suitable tactical organizations, 4th Training Cruiser, 1st to 7th Torpedoboat Flotillas, 1st to 3rd Mine Sweeping Divisions, 1st and 2nd Submarine Flotillas, "Hamburg", "Stettin", Fleet, Station N, Commandant Heligoland and Commandant Wilhelmshaven.

Translated by Ensign Walter A. Hibbs, U.S.N.R.

The Commander of the Scouting Forces
Wilhelmshaven, 18 August 1914.

Basic Rules for the Protection of the German Bight.

The protection of the German Bight will from now on be planned according to the following basic rules, which replace those in force from the second of August until now.

1. By day:

(a) Torpedoboat line, an arc, the center the Elbe Light Ship No. 1, the radius 35 miles;

One torpedoboat flotilla, that will cruise with various courses according to the order of the flotilla commander between the arcs 35 miles from Elbe Light Ship No. 1 and 29 miles from Elbe Light Ship No. 1.

(b) Line of outpost boats: Heligoland---Suderhever (line No. 1, 5 boats), Heligoland---Spiekeroog (line No. 2, 7 boats). The outpost boats will steam by day at low speed (about five knots) in the direction of the outpost line back and forth; on each hour and half hour they will reverse course, see sketch. (1)

(c) About three light cruisers behind the line of the outpost boats; one of the cruiser leaders of torpedoboat flotillas in each of the river mouths. (Wireless-telegraph transmitter).

(d) One torpedoboat flotilla, one mine sweeping division, and submarines in Heligoland and the inner German Bight; one mine sweeping division in Wilhelmshaven or at the Schillig Roads. (2)

(e) Aircraft at Heligoland and Borkum, later also at Norderney.

(f) Airship "L 3", later "L 4".

2. Object of the day protection: The protection of the German Bight in the first line against enemy submarines, in the second line against mine layers.

3. Tactics in the day protection: Torpedoboats shall not oppose destroyers, but shall withdraw from their presence, they shall attempt, they and such light fighting craft, to draw them to the submarines, of which, as a rule, a portion is to be ready for getting under way at the report of worth while enemy fighting ships.

At a safe opportunity for attack, submarines are to attack both destroyers and light cruisers.

Outpost boats report the appearance of enemy fighting ships, especially submarines (specify exactly whether submarines have really been seen, or only suspicious signs of the presence of submarines exist); they fire at submarines, if these are known with certainty to be enemy and they seek to ram them. At the appearance of enemy destroyers and cruisers they come in toward Heligoland or into the river mouths.

Light cruisers proceed against destroyers and such light fighting ships, however, as soon as submarines are reported, they retire by day into the river mouths and estuaries.

(1) Not presented here, but compare chart 18.

(2) The third of the Mine Sweeper Divisions is cleaning boilers at Cuxhaven.

Light cruisers shall be exposed to submarine attacks, at least not the modern fleet cruisers.

As soon as enemy submarines are reported in the inner German Bight, the torpedoboat flotilla lying in Heligoland will rush out and seek, through zig-zag courses to render their stay more difficult and to force them to frequently come to the surface and to a rapid exhaustion of their battery power.

The line sweeper divisions stationed in Heligoland will search by day for submarines, without special command and without sweeping gear, in the Bight inside the inner protective line. Should they otherwise be required for the protection of outbound ships and divisions, there will follow a special order.

Aircraft, as a rule, will be sent for scouting and searching for submarines only at the command of the Commander of the Scouting Forces. The airship will scout, as a rule, without particular orders, according to its technical ability; it will report immediately arrivals and departures through wireless telegraph.

4. By night:

(a) Arc of the line of torpedo boats, center the Elbe Light Ship No. 1 radius 25 miles (up to the 21st of August includes a radius of 25 miles, from the 22nd of August at evening at 25 miles; from the 22nd of August on the outpost boats also remain in position at night); one torpedoboat flotilla, that steams back and forth in the direction of the outpost line according to the directions of the flotilla commander.

(b) Line of outpost boats: from the evening of 22 August on ---positions as at day; however the boats steam back and forth on courses perpendicular to the outpost line from the moment of the receipt of the orders for the night protection from the Commander of the Scouting Forces; every half hour reverse course at the direction of the flotilla commander. At darkness: wing boats of the line no. 1 and the left wing boat of line no. 2 are to anchor.

(c) About three light cruisers behind the line of the outpost boats, one leader of torpedoboats (cruiser) in each of the river mouths (radio transmitter); if the situation permits, with the attack flotilla.

(d) One light cruiser for the protection of Heligoland Bay behind the sand hills (Commander Scouting Force, 10 August 415 . 1).

(e) One torpedoboat flotilla (ready for getting under way), one line sweeper division and submarines in Heligoland Bay.

(f) One outpost boat (battleship of the line or large cruiser, with nets) at Buoy 9 in the Jade.

5. Purpose of the night protective plans: Protection of the German Bight first of all against mining and blockade attempts.

6. Tactics in the night protective plans: Torpedo boats give way to destroyers and light cruisers, returning to their posts as soon as possible; otherwise they attempt to remain unnoticed, so as to be able to transmit signal concerning sighting of the enemy.

Light cruisers: destroy destroyers and other light fighting craft.

Torpedoboat flotilla from Heligoland Bay attack, as soon as a worth-while objective is reported.

All light fighting craft attempt to prevent attempts at blockade against the Jade, Weser, and Elbe, with all means.

7. Detached cruisers, flotillas, etc., must always so arrive that they have passed the blockade before the fall of darkness; otherwise they will anchor in a river mouth or at Schillig Roads, and report station by radio.

8. Report proposed target practice with the practice area (square) to the Commander Scouting Force, always two hours before beginning, for transmission to all scouting forces, commanders, etc.

Submarines may not exercise in the vicinity of the line or outpost boats. With exercising submarines will always be found a half-flotilla boat (large torpedo boat) with two red flags in the top.

9. The LMS is protected, in addition to a torpedoboat half flotilla, by a fleet cruiser, "Carcona", four fishing steamers, and one torpedoboat flotilla under the direction of the senior officer afloat. The flotilla serves in the first place the purpose of combat, and is only in pressing cases employed in addition for guard duty.

Signed:

Hipper
Rear Admiral and Commander
of the Scouting Force.

Copies to: Fleet 1st, 2nd, 3rd, 4th, 5th, 6th Squadrons, all cruisers with admirals, 1st to 8th Torpedoboat flotillas, 1st to 3rd Line Sweep Divisions, "Hamburg", "Stettin", 1st and 2nd Submarine Flotillas, Station H, Airship and Flying Division, Chief of the Outpost Boats on the "Lilvane", Commandant Wilhelmshaven, Commandant Heligoland, Commandant Cuxhaven, Commandant Geestemunde.

Translated by Ensign Walter A. Hibbs, U.S.N.R.

Reproduced from
best available copy.

Commander of the Submarines.

Heligoland, 25 August 1914.

Order for the Tactics of Submarines upon the Sudden Approach
of the
Enemy to Heligoland.

1. It is intended that the ships will be employed in accordance with the war situation and to impart to them orders for this.

2. However, if orders are given only for prompt sailing, the Submarine Lines 1 and 2 of the sketch ⁽¹⁾ will be occupied first of all, and the positions will be steered for independently by the submarines. All of the ships not assigned to the Submarine Lines will go to the center of square 158 epsilon. They will assemble here on the leader ships.

3. The commander of a submarine half-flotilla who is senior for the time being each evening affects a distribution of the leader ships and submarines lying in Heligoland Bay, in accordance with Paragraph 2. This distribution holds for twenty-four hours. With a change in the number of ships during this time a redistribution is to be made at discretion of the Commander as soon as practicable. With this principle in mind, a distribution of both Submarine Lines is considered first. The highest number of submarines in Line 1 (4 miles) four, in Line 2 (12 miles) five. As far as possible, small boats are to be assigned to Line 1 because of the little depth of water. It must be arranged on which leader ships in the center of square 158 epsilon the available ships above nine are to assemble. As far as possible in the assignment of ships, the integrity of half-flotillas is to be maintained.

4. ~~At 0800~~, all submarines put to sea from the south harbor, and, of course, the ships assigned to the Submarine Lines first. All submarines always lie with their bows to seaward.

5. The flotilla cruisers cover the departure of the submarines from the south harbor at first, and then act according to the circumstances.

6. The submarines assembled by the leaders in the square 158 epsilon are to attack from there according to the situation; in case no order appears, act according to the judgment of the respective half-flotilla commanders. The unassigned leader ships act according to their own judgment.

Signed:

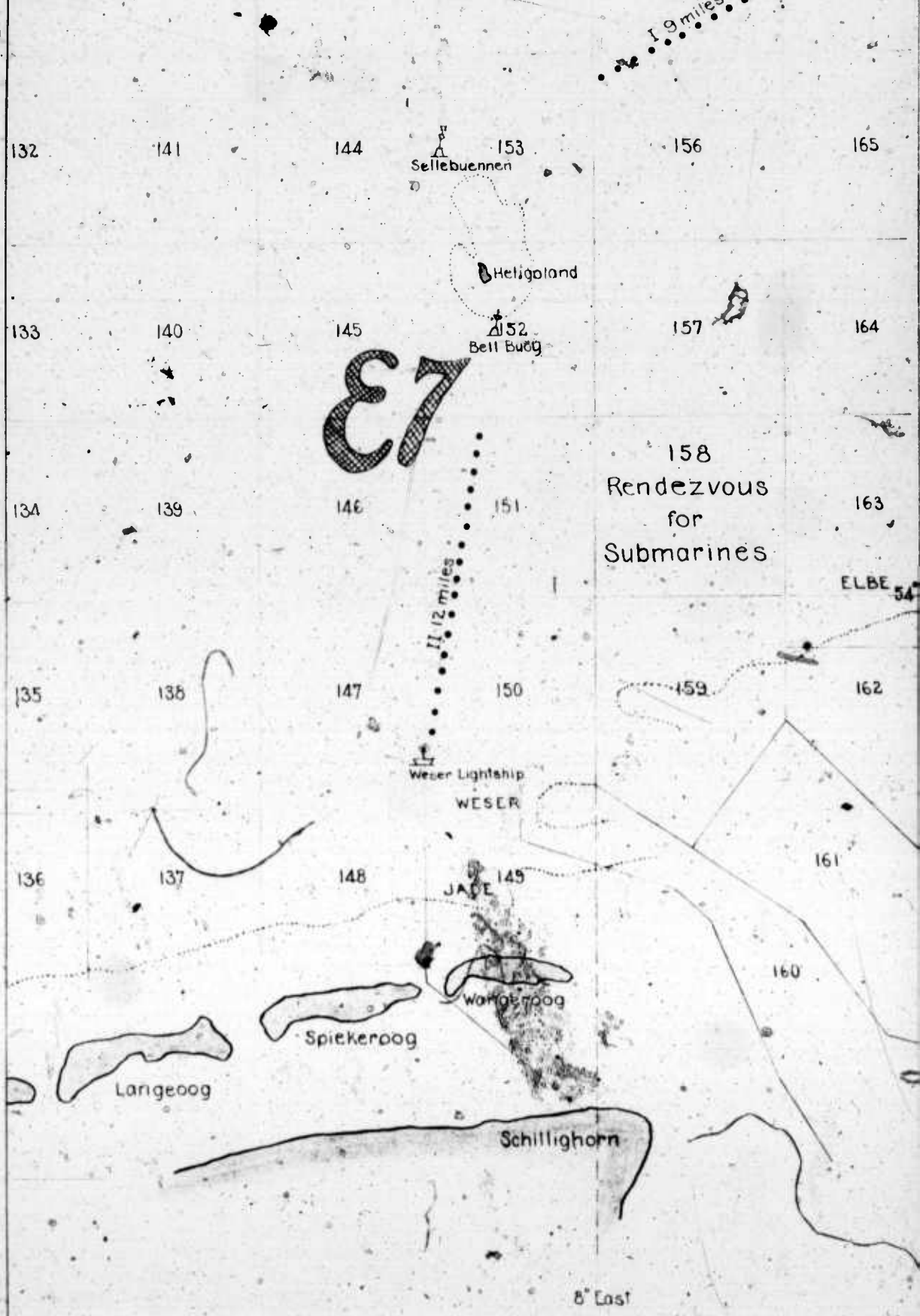
Bauer.

Copies to:

1st and 2nd Submarine Flotillas, "Hamburg", "Stettin", all submarine half-flotillas and all submarines.

(1) See Appendix 17a.

Translated by Ensign Walter A. Hibbs, U.S.N.R.



SKETCH FOR APPENDIX 7

113

A pendix 18.

Command of the High Seas Fleet.

Jade, 13 August 1914.

The Guarding of the Ems.

Under normal circumstances the guarding of the Ems will go on in the following manner:

1. By night: The harbor flotillas and outpost boats will be at their posts under the direction of the senior commanding officer of the Ems.

One group of boats of the torpedo boat flotilla will lie outside for attack on enemy mine layers and cruisers; retiring before destroyers, ascertaining however, whether an object worthy of attack follows the destroyers.

The rest of the torpedo boat flotilla in the Ems near Borkum ready for putting to sea at report of enemy mine layers or cruisers.

2. By Day: The guarding will be maintained by the harbor flotilla and the outpost boats under the direction of the senior commanding officer of the Ems.

The torpedo boat flotilla goes at daybreak at the judgment of the flotilla commander, if in any way possible, to Emden for rest and recreation for the crew, or it anchors in the Ems. It must have again taken its station for the night at the approach of darkness.

3. The senior commanding officer regulates the distribution of guard duty of the high seas cruisers and S.I.S. "ARCONA". Furthermore, it is up to him, at the approach of any particular situation, whether or not to order variation from the instructions given above under 1 and 2 that are more suitable to the situation.

Signed:
von Ingenohl.

Copy to: Commanding Officer of the Scouting Forces.

Translated by Ensign Walter A. Hibbs, U.S.N.R.

174<

Appendix 19.

Wireless Message from "SEYDLITZ" to the Fleet.
25 August 1914, 1:06 P.M.

From 26 August on, Day Protection Plan, one torpedo boat flotilla outer outpost line from 150 epsilon center to Heligoland in SE by E $\frac{1}{2}$ E 25 miles to Norderney whistling buoy.

In the outpost line it will cruise with various courses toward inner lines. One Minesweeper Division middle outpost line from Schmal-Tief buoy to Heligoland in SE by E $\frac{1}{2}$ E 12 miles to Langeoog church. In the outpost line cruise on various courses. Outpost boats as heretofore.

Commander of the Scouting Forces.

Translated by Ensign Walter A. Hibbs, U.S.N.R.

LIFE IN A GERMAN WARSHIP.
EVERYTHING AT THE POINT OF THE REVOLVER.

Letters from Navy and Army.

Navy.

From a stoker petty officer: It was pitiful to see the German prisoners when the destroyers picked them up after the battle. They were jumping into the water like people mad; most of the saved were stokers. In about an hour was all over.

The first shot at the Mainz from our destroyers swept the upper deck of the Germans. They hoisted the white flag, so two of our destroyers were going up alongside of the now sinking German ship when her captain sang out to the gun's crew to fire the only gun they had left on us. The crew wouldn't, so the captain jumped off the bridge and fired it himself and then shot at the crew. The commander and some signalmen of the destroyer were killed.

Our destroyers picked up as many as they could; most of them were brought aboard this ship. In this same German ship were three of our own R.N.R. men. They were serving in a German liner when the war broke out. The Germans took them off and put them in their own warships to fight for them. Not one of them got killed. They came aboard here, so we had a full-speed run with the prisoners to Sheerness. These R.N.R. men told us, that aboard the German ship everything was done at the point of the revolver. The stokers had been down on watch from Monday until Friday.

They also told us there were two brother stokers, in the engine-room when one of our shots went right through the engine-room and injured one of them. The brother that didn't get hit caught hold of his injured brother and tried to carry him up on deck, when the German engineer shot him dead. The prisoners were nearly starving when we got them aboard. Our destroyers didn't suffer much considering.

THE NORTH SEA -- Volume I

COMPILATION

GERMAN WIRELESS MESSAGES

28 August, 1914.

Translated by
Ensign Walter A. Hibbs, U.S.N.R.

Compilation of the German Wireless Messages of the 28 August 1914.

Prefatory Note: The times marked with an asterisk are the times of arrival at the Fleet, in all other cases the source of the time given is especially denoted; without inferring therefrom that the fleet command did not receive the wirely message.

Message

From	To	Number or time of des- patch.	Time of Receipt	Contents	Remarks
G 194	1st Tor- pedo Boat Flotilla	?	6.26 am *	Fired upon by en- emy submarines in center of square 142 epsilon enemy force steering northwest	
G 194	Koeln (Flagship) 1st leader of the tor- pedo boat forces.	1825	6.50 am *	Was attacked 6 am by a submerged sub- marine in center square 142 epsilon two torpedoes, not hit. Saw the peri- scope distance 50 m. false alarm impossible. Enemy submarine steer- ing NW.	
Seydlitz (Flagship) Comdr Scou- ting Forces	Heligoland Island	1912	7.12 am	To Flight Division Search for enemy submarines when possible square 142 epsilon. Cdr Scgt Forces	Time is that of Squadron III.
Seydlitz	Koeln	1910	7:14 am	Torpedoboat Flo- tilla V to hunt enemy submarine square 142 epsil- on.	Time of Squadron III.
Koeln	Torpedo Boat Flot- tilla V	1910	7:25 am	Torpedo Boat Flo- tilla V will search for submerged sub- marine in square 142 epsilon. Tor- pedo boat Flotilla V expedite depart- ure	Time is that of Comdr Scouting Forces
Koeln	V 185 (Should be called G-194)	1930	7:28 am	Why was not the enemy submarine reported immedi- ately?-Leader of Torpedoboats.	Time is that of Squadron III.

Heigoland Fleet Com- 1925
Island mand and
Seydlitz

7:35
am

To Comdr of
Scouting Forces.
Aircraft 59 has
flown north seeks
enemy submarine.
(Flight Sta.)

Time is
that of
Squadron
III.

G-196 ? 8:06
am

? G-194 is pursued
in square 142 ep-
silon by enemy
cruisers - G-196

V-187 Koeln 8:20
Leader boat of
Torpedo-
boat Flo-
tilla I am

8:23
am
* To Leader of Tor-
pedoboats. Two
destroyers in
116 beta.

V-160 Koeln 2005
Should be
called
G-194

8:23
am V-160 (should be
G-194) attempts to
cut off submarine
of enemy. The re-
ported enemy sub-
marine is steering
NE by N. Time is
that of
Squadron
III.

G-194 Koeln 2005

8:25
am Detached enemy
forces square 142
epsilon. The re-
ported enemy forces
steering south Time is
that of
Torpedo-
boat half
Flotilla
& Squad-
ron II

G-194 Torpedo-
boat Flo-
tilla I 2005

8:25
am * 8:05 am G-194 is
attacked by ene-
my cruisers. Ene-
my is in square
142 epsilon and
steering south. This im-
portant
wireless
message
could be
delivered
only after
20 min.
delay.

Torpedo- Koeln 2025
boat Flo-
tilla V

8:29
am Half-Flotilla X
being fired upon
in 142 epsilon,
left center. Time is
that of
Squadron
II.

V-187 Koeln ?

8:30
am * To-Leader of the
Torpedoboats.
The reported ene-
my combat forces
are steering SSE.
V-187 Squadron
III has
overheard
reported
enemy
submarine
etc.

G-194 Koeln ?

8:31
am 142 epsilon. At-
tempting cut off
enemy submarine. Time is
that of
Squadron
III.

G-196	Koeln	?	8:35 am	Detached enemy forces 142 epsilon, left center. Am fired upon. #1-Torpedoboat Half Flotilla II	
Leader boat of Torpedo-boat Half-Flotilla II					
Torpedoboat Flotilla V	Torpedo-boat Half-Flotilla X	9:29 am	8:25 to 8:40 am	Proceed to Heligoland	Time is that of Half-Flotilla X.
G-9	Koeln	2025	8:38 am *	To-Leader, Torpedoboats. 4 destroyers in 142 epsilon, steering south - G-9	
G-194	Koeln	2005	8:40 am *	G-194 is being attacked by a enemy large cruiser. G-194	Recd on Koeln after 35 min delay. At message Flt Chief ordered "Submarines proceed".
V-187 Cdr Setg Forces writes V-191	Koeln	?	8:45 am *	To Leader of Torpedoboats. 2 enemy light cruisers in 132 beta steering SE - V-187	
Seydlitz	Stettin	8:02 am	8:47 am *	Stettin pursued destroyers-Comdr Setg Forces	
Torpedoboat Flotilla V	Koeln	?	8:50 am	1 Cruiser and 20 destroyers pursuing. Torpedoboat Flo. V	Time is that of Squad. II.
V-187	Torpedo-boat Flo. I	2045	8:50 am	2 further enemy cruisers in 131 beta.	Time is that of Flo. I
Seydlitz	Frauenlob	8:02 am	8:50 am *	Frauenlob also will proceed against the destroyers.	
G-12	Koeln	?	8:50 am *	To-Leader Torpedoboats- & Cdr Setg Forces. - 9 enemy destroyers in 142 epsilon, lower right	
Torpedoboat Flotilla V	Koeln	8:45 am	8:55 am *	Request aid of cruisers. Torpedoboat Flo. V	
Stettin	Seydlitz	2050	8:58 am *	To Cdr Setg Force, - Stettin is going to 142 epsilon. Submarines taking attack position. SubFlo II.	

Stettin	Cdr Setg Forces	9:06 am	?	Am in engagement with enemy destroyers.	From war log of Stettin.
Seydlitz	G-12 & Koeln	8:50 am	9:07 am *	To-Torpedo boat Flo. V - 'Stettin & Frauenlob' Coming at once Cdr Setg Forces.	
G-12	Koeln	?	9:10 am *	Stettin needs assistance. - Torpedoboat Flotilla V	
Koeln	Torpedo-boat Flo. I and V	?	9:10 am	Torpedo boat flotillas I & V go back to gun range of Heligoland. Ldr Torpedobts.	Time is that of Flo. I
Seydlitz	Stralsund Tel.	9:10 am		As soon as possible come to roadstead. Cdr Setg Forces	Time is that of Stralsund
Stettin	Comdr Setg Forces	9:10 am	9:15 am	Urgently need assistance 142 epsilon. An enemy cruiser is with the enemy flotilla.	Time is that of Cdr Setg Forces.
V-187-	Koeln	2045	9:17 am *	Besides the enemy forces reported are 2 enemy cruisers in 131 epsilon. V-187	
V-187	Koeln	2105	9:18 am *	The reported enemy forces are out of sight with course SE - V-187	
G-12	Koeln	?	9:20 am *	Frauenlob is being fired upon. Destroyers in 146 epsilon steering SW- G12	
Torpedoboat Flotilla V	Comdr Setg Forces	?	9:22 am	Am being fired upon by destroyers in 146 epsilon on. They are steering SW	Time is that of C.S.F.
G-12	Koeln	?	9:23 am	Six enemy cruisers in 132 epsilon	Time is that of Stralsund
Frauenlob	Koeln	?	9:23 am	Am being fired upon. Destroyers in section 146 epsilon, steering southwest.	Time is that of Strasburg.
V-190	Koeln	?	9:24 am	Six enemy cruisers in sight 123 epsilon V-190	Time is that of C.S.F.
Seydlitz	Danzig Munchen	2100	9:28 am *	Put to sea immediately with all speed. C.S.F.	
Torpedoboat Half Flo. I	Koeln	9:29 am	?	2 enemy cruisers in 133 epsilon pursuing Torpedoboat Half Flo I Torpedobt Hlf Flo. I	War log of Tor-Half Flo. I.

Torpedoboat Flotilla I	Stettin	?	9:31 am	Torpedoboat Flotilla I 133 epsilon pursued by enemy cruisers.	Time is that of Stettin
Koeln	Torpedobt Flos I&V	2130	9:32 am *	Koeln is putting to sea from Wilhelmshaven - 1st Ldr of Torpedoboats	
V-187	Koeln	?	9:33 am *	To Leader of Torpedobts. 2 enemy cruisers pursuing Torpedobt Half-Flo I in 133 epsilon. - V-187	
Torpedoboat Half Flo I	Comdr Sctg Forces	?	9:34 am	6 enemy c ruisers in sight 132 epsilon.	Time is that of C S F
High Seas Commander	Comdr Sctg Forces	2120	9:42 am	Large cruisers raise steam and stand by for getting underway promptly.	
V-191	Koeln	?	9:43 am *	To-Ldr Torpedoboats. Enemy cruisers have drawn off to the west in 134 epsilon, upper right. Tor.Bt Half Flotilla I	In war log Comdr Sctg Prce following reported enemy cruisers out of sight with course SE
Seydlitz	Mainz	2122	9:47 am *	Mainz at once attack in rear enemy torpedo-boat flotilla near Heligoland. C.S.F..	
Torpedoboat Half Flo. I	Koeln	9:50 am	?	Fired upon 2 submerged submarines in 139 epsilon.	From war log of TB Half Flo I
Seydlitz	Fleet	9:50 am	9:50 am. visual *	Lay Moltke & Von der Tann put to sea for support as soon as ready? - CSF	
Frauenlob	Heligo-land Is	2145	1000 am	To-Friedrich der Grosse & Seydlitz - Have had an engagement with enemy cruiser, 3 stacks flotilla of 10 ships visible ahead. Brisk engagement. Enemy drew away toward NW. Am damaged shall I come in? Slightly wounded (It should be reported 5 dead, 13 severely wounded, 19 more lightly wounded.) Frauenlob.	
Seydlitz	Heligo-land Is	2135	1000 am *	Submarines hold themselves ready for combat. CSF	

High Seas Commander	CSF & Flight Divs. Heligoland	2130	1003 am	Aircraft scout toward IV Report kind of enemy cruisers, establish what if any combat craft lie behind the cruisers. High Seas Comdr.	
Stettin	Seydlitz	2143	1007 am *	Enemy is strong, 1 cruiser 20 destroyers, 154 epsilon and 155 epsilon may be mined. - Stettin.	
Fleet	Seydlitz	1008 am	?	To CSF: Moltke & Von der Tann may proceed at the direction of CSF if enemy is then still there. High Seas Commander	
Stettin	Seydlitz	2253	1010 am	Enemy is standing off the barrage. 1 Cruiser 20 destroyers, 154 epsilon 155 epsilon may be mined. - Stettin.	Time is that of Posen, 2nd Admiral Squad. I
Stettin	Seydlitz	2210	1012 am *	Am in an engagement with enemy destroyers 133 epsilon. - Stettin	
Heligoland Island	Seydlitz	2200	1015 am *	To Stettin - Submarines have already got underway. - S-99	
Heligoland Island	Seydlitz	2205	1020 am *	1 enemy light cruiser 26 (should probably be 20) destroyers in V in engagement with Stettin and our torpedo boat flotilla. A hit on an enemy destroyer in forward part of ship easily observed. Airplane 21 & 59 fired upon without result at altitude of 600 m. Flight Station.	
L-3	CSF	2210	1032 am *	To CSF. 850 am. Wheeled before the enemy cruiser in 142 epsilon. Am returning to Fuhlsbittel for technical reasons. L-3	
Heligoland Island	Seydlitz	2220	1040 am *	Airplane 21 has taken off. - Flight Sta.	Received twice at Fleet.
same	same	2240	1052 am *	same	
Strassburg	Stettin	2255	1100 am	Strassburg in 138 epsilon. Please send me course & position.	Time is that of Squad III

Seydlitz	Stralsund	by search light	1100 am	Proceed immediately to support of Koeln	Time is that of Stralsund
Torpedoboot Half Flo. I	Koeln		2230 1113 am	10 am. Fired by 2 submerged submarines in 139 epsilon. Torpedoboot Half Flo. I	Time is that of CSF.
V-191	Koeln		2100 1120 am *	To Ldr of Torpedobts. 2 further enemy cruisers 139 epsilon drawing off towards W. TB Half Flo. I.	
Strassburg	Heligoland Is		2320 1122 am	Please send position of Stettin.	Time is that of Squad II.
Strassburg	Heligoland Is		2320 1125 am *	Position 135 epsilon NW speed 24 knots. Strassburg	
Heligoland	Strassburg		2325 1126 am	Have lost sight to westward.	Time is that of Squad II.
CSF	via Cuxhaven to Danzig		2325 1130 am *	Go immediately to the mouth of the Elbe. CSF	
Seydlitz	Fleet		2325 1131 am *	Koeln-Strassburg and Stralsund have sailed. Kolberg follows. Some submarines underway. CSF	
Seydlitz	Ariadne Ldr of harbor flotilla Jade-Weser & Niobe.		2325 1133 am *	If possible proceed to support. CSF	
Intelligence Division at Wilhelmshaven	Flt	Telephone	1135 am *	Telegram from Heligoland for High Seas Cdr Wind ENE force 1 sea 0 hazy, visibility 4 miles Telephonic connection with Wilhelmshaven was not to be until now. NS 721	
CSF	Moltke & Von der Tann		1130 1135 am	Anchor at Schillig roadstead, ready to get underway.	Time is that of Holtko.
Koeln	Fleet	Sq II got	2255 1138 am *	132 beta and 133 epsilon are suspected of being mined. Ldr of Torpedoboats.	
Koeln	V-187		2345 1144 am	Report ship's position	Time is that of Stralsund

Danzig	Seydlitz 2345	1148 am	To CSF-Am in 158 epsilon. Shall I retire? Danzig
Torpedoboat Half Flo. I	Koeln & Rostock (Flag 2nd leader of Torpedobts)	1150 am	Torpedoboat Flotilla I is at Sellebrunnen Buoy G193 in patrol line, V-187 is missing
		?	In the war log of TB half Flo. I is said "Radio mes- sage was not re- ceived by Koeln & Rostock."
Mainz	Strassburg 2346 & Stettin	1150 am	Position 093 epsilon course N 23 knots. Mainz.
		*	
Strassburg	Koeln & Seydlitz	2355 1157 am	To CSF - & Ldr of Torpedoboats - In 123 epsilon in engagement with destroyers, course WNW. - Strassburg.
		*	
CSF	Munchen & Danzig	2357 1200 noon	To Munchen & Danzig. Await further orders in mouth of Elbe. CSF.
		*	
?	?	?	1207 pm
			Severely damaged. Both boilers useless, lying (garbled) 1 torpedoboat. Kolberg.
Heligoland Island	Seydlitz	2335 1208 pm	To CSF - I have tempo- rarily broken off en- gagement in 133 epsilon apparently several Bri- tish destroyers heavy damage. Destroyers for- ced away. Radio Station out of commission. 4 dead, 2 severely wounded and 8 lightly wounded. Stettin.
			Time is that of Squad III.
Strassburg	Seydlitz 0008 & Koeln	1212 pm	Am in engagement with 2 enemy cruisers and de- stroyer flotilla. Stras- sburg in 122 epsilon on course NE - Strassburg.
		*	
Koeln	Mainz	0008 1213 pm	Request position. I come to your assistance.
			Time is that of Squad. III
Heligoland Island	Seydlitz	2300 1215 pm	Tow ? V-3, T-33 to Hel- igoland then proceed to Wilhelmshaven. Frauenlob.
		*	

visual

Formation and tactics depend upon the behavior of the enemy.
High Seas Commander.

Koeln-	Mainz	0020	1220 pm	Request position.	Time is that of Strassburg
Seydlitz	Kolberg and Danzig	0019 Sq II 0010	1221 pm *	Kolberg Danzig get underway immediately go to Strassburg. CSF	
Seydlitz	Friedrich der Grosse	?	1225 pm *	I am sending the Moltke and Von der Tann temporarily to Schillig Roadstead. CSF.	
Strassburg	Koeln	?	1225 pm *	Request position. Strassburg.	
Koeln	Strassburg	?	1225 pm *	Koeln is coming. Position 127 epsilon course NNWest Ldr Torpedoboats	Squadron II received 121 epsilon left.
CSF	Danzig	?	1225 pm	Munchen & Danzig got underway immediately to go to Strassburg.	Time is that of Danzig.
Heligoland Island	Seydlitz	2340	1226 pm	Airplane 59 has flown northwest by west in order to scout up to limit of visibility. Flight Station.	Time is that of Squad. III
Strassburg	Koeln & Mainz	0025	1228 pm	121 epsilon general course west.	Time is that of Squad II
Stralsund	Seydlitz	0030	1230 pm *	Enemy submerged submarine in sight 148 epsilon, upper right. Stralsund.	
Stettin	Seydlitz	0020	1232 pm *	To CSF 133 epsilon engagement terminated. Pursued destroyers, several destroyers apparently damaged. Stettin	Reports concerns 1013 am & because of destruction of wireless antenna could be delivered until 12 20 PM
Kolberg	Seydlitz	0030	1238 pm *	Position Minsener Sand Kolberg.	186<

Stettin	Koeln	0032	1245 pm *	Position 151 epsilon W by N 23 knots. Stettin.	
Munchen	Seydlitz	0040	1246 pm *	To CSF - Got underway at 1240 pm 18 knots. Munchen.	
Strassburg	Koeln & Mainz	0045	1250 pm *	In 117 epsilon north. Strassburg	
Strassburg	Mainz	?	1250 pm	117 epsilon W. Enemy lies to the south. Koeln position 116 ep- silon right. Course N.	Time is that of Stralsund
Mainz	Seydlitz	0054	1255 pm *	Am in engagement with destroyers. Mainz	
Strassburg-	Koeln	0050	1257 pm *	Position 117 epsilon. Course west. Enemy is to southward of us. Strassburg.	
Koeln	Mainz & Strassburg	0058	1259 pm *	Koeln is in 116 Epsilon right. Course North. Leader of Torpedoboats	
Seydlitz	Koeln	0055	100 pm *	To all leader boats of Torpedo Boat Flotilla VIII; Torpedo Flotilla VIII hunt enemy submar- ines in 147 epsilon secure inner German bight against enemy submarines according to plan. - CSF	
Mainz	Koeln	0100	102 pm *	Am pursued by enemy armored cruiser (pas- sed on from Koeln to Seydlitz).	Last mes- sage from Mainz.
Koeln	Seydlitz	0100	105 pm	Am pursued by enemy armored cruiser. Mainz.	Time is that of Squad III In the war log of CSF this message is enter- ed 103pm.
Ariadne	Koeln	0045	107 pm	Ariadne will come 135 epsilon.	Time of Strassburg
Stralsund	CSF	?	108 pm	Am in 135 epsilon upper right. Course West.	Time is that of Stralsund
Seydlitz	Moltke & Von der Tann	0107	110 pm *	Go to support. Sey- dlitz follows. CSF.	

Stralsund	Fleet	?	114 pm *	Am in engagement with 3 enemy light cruisers Course east.	In the war log of the Strassburg time is 2.12 pm.
Danzig	Strassburg & Koeln	0115	120 pm *	Danzig in 139 epsilon upper right, course W by N 22 knots. Danzig.	
Strassburg- Mainz		0115	120 pm *	Request position course Strassburg 104 epsilon SSW Strassburg.	
Stettin	Koeln	0110	125 pm *	Am in 140 epsilon lower left NW give ship's pos- ition - Stettin.	
Seydlitz	Koeln	0121	125 pm *	Torpedoboat Flotilla VIII will provide submarine defense for battler cruis- ers putting to sea. CSF	
Stettin	Koeln	0126	127 pm *	133 epsilon center. Course NW 3/4 W. - Stettin.	
Koeln	Stettin	0120	128 pm	105 epsilon upper. Ldr of Torpedoboats.	Time is that of Strassburg
Koeln	CSF	?	130 pm	116 epsilon course N am in engagement with dostroyers.	Time is that of CSF
3rd Entrance Wilhelmshaven	Flt Tele- phone	130 pm *	Will proceed with bat- tle cruisers. CSF		
Koeln	Seydlitz	?	132 pm	Am in engagement with destroyers -- signal is fading	Time is that of Strassburg Squad II gives time 128. Last signal fr from Koeln.
Hamburg (Fl- S-99 agship of Flo.Comdr. Subflo I		0130	134 pm *	Submarines attack the enemy in the vicinity of Heligoland. SubFloComdr.	
Hamburg	Subflo III	0130	135 pm	Enemy in vicinity of Heligoland. Submarines attack as well as pos- sible. SubFloComdr.	Time is that of Squad III
Strassburg	Koeln	0135	137 pm *	105 epsilon upper left, West 25 knots. Strassburg.	128<

Stralsund	Koeln & Strassburg	0135	140 pm *	123 upper right 147 23 knots-Stralsund.	
Stralsund	Seydlitz & Heligoland Is.	?	140 pm *	Radio Koeln apparently out of commission. Stralsund	
Heligoland Island	Seydlitz	?	144 pm	S13 and V2 have lines around D-8. Should be brought under escort to Wilhelmshaven	Time is that of Squad II
Torpedoboat Half Flo I	Koeln	0020 Sent at 147 pm	150 pm *	V-187 sunk G11 and G9 have picked up 40 men in 133 epsilon. G-11	
Heligoland Island	Seydlitz & Stralsund	0020	150 pm *	Transmit to Koeln. V-187 sunk G11 and G9 have picked up 40 men in 133 epsilon. G11	
Danzig	Stettin	0140	155 pm *	Danzig 134 epsilon upper right, W by N. Danzig.	
Strassburg	Mainz	?	155 pm *	Stettin radio station is apparently out of commission. Strassburg	Radio Station Stettin actually was a- gain ready for use 12 mn
Strassburg-	CSF	?	200 pm	105 epsilon, NN 24 knots. Am pursued by enemy armored cruiser	Time is that of CSF
Stettin	Fleet	205 pm	210 pm	Enemy armored cruisers 127 epsilon.	Time is that of Kolberg. Strassburg heard large cruisers.
CSF	Munchen	206 pm	?	Scout in the direction of Amrun Bank.	Note from war log of CSF.
Stettin	Kolberg	?	210 pm	Several enemy armored cruisers in 127 epsilon.	Time of Kolberg Stralsund war log & CSF write large cruisers.
CSF	Von der Tann & Holtke	210 pm	?	Advance toward 128 epsilon.	

Strassburg	Seydlitz	0200	212 pm	105 Epsilon NW 24 knots am pursued by enemy arm- ored cruiser. Strassburg.
Stralsund	CSF	208 pm	212 pm	Position 122 epsilon am Time of in engagement with 3 CSF light cruisers of Town class. Course E. Enemy steering ENE. Stralsund.
Stralsund	Fleet	?	215 pm	Am in engagement with 2 Time is enemy cruiser squad- that of rons, course S. Squad III Stralsund.
Stralsund	?	?	220 pm	122 epsilon left center Time of Am in engagement with Danzig 3 enemy cruisers. Stralsund.
G-169	G--173 Ldr of TB Half Flo. VI	220 pm	?	Was fired upon by enemy submarine 094 epsilon miss - G-169
Strassburg	Fleet	0220	220 pm *	Am in engagement with 2 enemy cruisers of Town class. Course E. 104 epsilon. Strassburg.
Von der Tann	Seydlitz	?	222 pm	Take with you Torpedo- Time is boat Flotilla VIII that of 3rd Ad. of SCTG Force. Squad III
Stettin	Seydlitz	0221	225 pm *	Ariadne heavy damage 121 epsilon. Stettin.
Von der Tann	Seydlitz	?	229 pm	To Torpedoboat Flotilla Time is VIII Position 147 epsi- that of lon lower right course Posen. NW by 23 knots. 2nd Adm. 3rd Adm. of Sctg Fce. Squad I
Fleet	Squad I & Squad III	225 pm	?	Raise steam promptly. Comdr High Seas.
Strassburg	Fleet	0230	232 pm	Enemy armored cruisers Time is in 104 epsilon steering that of SW. - Strassburg Squad III
Strassburg	CSF	0233	235 pm	117 epsilon enemy arm- Time is ored cruiser squadron. that of Strassburg Squad III
Strassburg	Fleet	0235	?	117 epsilon battle cruiser squadron I Course SW.-Strassburg
Fleet	CSF	0230	235 pm	Recall all light cruis- Time is ers. High Seas Comdr. that of CSF

Fleet	2nd Ldr 235 of TBs pm	?	When will Rostock be ready to proceed? Have all tor- pedoboats ready to proceed this evening. High Seas Commander
Von der Tann	Munchen 0206	236 pm *	Munchen will scout in the direction of Amrun Bank lightship. CSF
Strassburg	Friedrich ? der Grosse	240 pm *	In 117 epsilon first one-Stralsund my battle cruiser squad- instead ron.-Strassburg of 1st got a
Vonder Tann	Seydlitz ? Strassburg Stralsund	245 pm *	Von der Tann, Torpedo boat Flotilla VII 138 epsilon right center NW by W. 23 knots. 3rd Adm. of Setg Free.
Seydlitz	Light 0245 Cruisers	250 pm *	All light cruisers retire on Moltke Von der Tann CSF
Danzig	? 025 0	255 pm *	Rescue crew of Ariadne
CSF	Light 0245 Cruisers	256 pm	Retire on battle cruis- Time is ors. CSF that of Posen. 2nd Adm. Squad I
Ostfries- land (flag Cdr Squad I)	Thuringen 0255	258 pm *	Thuringen raise steam immediately for full power. Squadron I
Von der Tann	Seydlitz ?	300 pm *	Von der Tann Moltke & Torpedo boat flotilla VIII in 135 epsilon upper right. NW by W 23 knots. 3rd Adm. Setg Free
Stettin	Seydlitz 0330	300 pm	To CSF May I go in for Time is delivery of dead and that of wounded and for coal Squad III supply? Stettin.
Danzig	All 0300	305 pm *	To CSF Danzig 121 ep- silon lower right. Danzig
Stralsund	CSF ?	307 pm	Ariadne burning in 129 Time is epsilon lower right. that of Stralsund CSF
Seydlitz	Rostock 0301	307 pm	Rostock, Torpedoboot Flotillas VII and IV proceed immediately from mouth of Jade ready for a night undertaking. CSF

Strassburg	Seydlitz	0301	311 pm	119 epsilon upper left Strassburg
Fleet	CSF	0306 trans- mitted 341 pm	?	Large Cruisers are not to oppose battle cruiser squadron. High Seas Commander
Kolberg	CSF	0312	320 pm	Strassburg Danzig rescue Time of crew of Ariadne 128 ep- CSF silon. Kolberg stands by 4 miles NW - Kolberg.
Seydlitz	Rostock	0304	320 pm	Torpedoboot Flotilla III stand by. Night enterprise CSF
Strassburg	Von der Tann	0301	321 pm	Am in 119 epsilon upper left. Strassburg
Seydlitz	All Cruisers	0325	323 pm	Seydlitz 330 pm 147 ep- silon left. course NW by W, 23 knots. CSF
Fleet	Comdr Squadron I	325 pm	?	Report when Division I and Squadron III are ready. High Seas Comdr
Strassburg	Seydlitz	0320	330 pm	330 PM 130 epsilon cen- Time is ter south southwest 22 that of knots. Strassburg Seydlitz
Strassburg-	Seydlitz	0532	333 PM	330 PM 130 epsilon cen- Time is ter SSW 23 knots. that of Posen. 2nd Adm. Squad I
Stettin	Seydlitz & Von der Tann	0316	340 pm	Position Stettin 145 epsilon upper. Time is Stettin that of Seydlitz
Seydlitz	Rostock	0340	345 pm	To Torpedoboot Flotilla IV Do not proceed. CSF
Rostock	Leader boat of TB Flo. IV	0340	?	TB Flotilla IV Do not proceed. CSF
Von der Tann	Seydlitz	?	348 pm	Von der Tann 134 epsil- Time is on upper left by Ariad- that of ne. 3rd Adm Setforces Seydlitz
Seydlitz	Stettin	0342	350 pm	Stettin proceed to port. CSF Time is that of Squad III
Kolberg	Strassburg	345 pm	?	Where is enemy? Answer: From war last seen 117 epsilon log of 4 battle cruisers. Kolberg

Seydlitz	Von Der Tann & Holtke	0355	400 pm *	Von der Tann & Holtke do not advance farther than 128 epsilon there await Seydlitz. CSF	
S-165	Torpedob 350 Half Flo. V		?	1 Enemy cruiser with 2 destroyers on course high speed 074 epsilon S165	
Seydlitz	Torpedo- boat Flot. VIII	?	402 pm	Search 147 epsilon for submarines and guard the inner German bight. CSF	Time is that of Squad III
Blucher	Seydlitz	0403	403 pm	Position 147 epsilon course NW by W 21 knots Blucher	Time is that of Stralsund
Seydlitz	Strassburg	?	406 pm	Do you need support? Answer from Strassburg 'No'.	Time is that of Stralsund
Seydlitz-	Mainz	0410	?	Report position CSF	
Leader boat TB Flo. IV	Rostock	0410	412 pm *	Shall I proceed	Compare with this wireless 0340
Seydlitz	All	0400	414 pm *	4 Pm position Seydlitz 134 epsilon lower, NW 24 knots.. CSF	
Squadron I	Fleet	?	430 pm *	Division I ready for sea at 530 PM Squadron III 6 .30 PM Squadron Command	
Radio Sta. Neunmunster	Seydlitz	0307	440 pm	L-3 returned home at 1.20 p.m. Airship division.	Time is that of Seydlitz
Seydlitz	TB Flot I	0435	448 pm	Transmit to all TB flotillas. Patrol boats form inner outpost line Report when in position. CSF	Time is that of Squad II
Munchen	CSF	?	448 PM	Munchen in 143 epsilon lower.	do
Seydlitz	TB Flo. I	0431	448 pm	TB Flotillas I and V return to port.	do
Fleet	Squad I	445 pm	?	Division I as soon as ready anchor at Schillig Roadstead. High Seas Comdr.	
TB Flot. VII	Rostock	0400	448 pm *	Standing out with 8 boats. TB Flotilla VII	

Intelligence Fleet Wilhelmshaven	1110 am	500 pm *	Airplane 21 reports 30 miles nw 1/2 W from Heligoland 1 submarine on surface. On return flight (1 pm) 25 miles N Juist periscope of a submerged submarine on course W. Intelligence Section	A delay of six hours occurred with this report.
Seydlitz	Heligoland Island 0456	508 pm *	TB Flotilla VIII form outpost line for night. CSF.	
CSF	All 0502	512 pm *	6:30 PM High Security TB Flo. VII outer outpost line, patrol boats the inner line. Kolberg southern flank, Hela northern flank, Munchen protects Heligoland Bay Rostock, TB Flo. VII Strassburg the river mouths. Aircraft scout if possible. CSF.	Remarks of the Flt Cdr: Suggest CSF place 2 flotillas in outer outpost line
Friedrich der Grosse	Seydlitz 0447 trans. 5.24 pm	5.24 pm	CSF Report immediately whether support by battle ships is necessary. Comdr High Seas.	
Danzig	3rd En- 0440 Trance Wilhelmshaven	5.28 pm	Probably arrive at 730 pm with about 170 rescued men of whom 40 are severely wounded from Ariadne. Please make the necessary preparations Danzig.	Time is that of Sq. III
Seydlitz	Friedrich der Grosse 05 33	5.35 pm *	To the Fleet Command. Enemy not in sight, going back to Jado. CSF	Remarks of Flt Comdr. Ask CSF concerning Mainz Strassburg Stralsund.
Seydlitz	do 0506	536 pm *	To Flt Command Large Cruisers Munchen, Strassburg, TB Flo VII in 128 epsilon at 5.15 pm course SSE Ariadne sunk in 128 epsilon. Rescued portion of crew from them now on Stralsund and Danzig. No communication with Koeln and Mainz. CSF.	
Friedrich der Grosse	All 0558	600 pm	To all Areas suspected of mines are reported as 154, 155, 133 epsilon and 132 beta, supplementary figure 7. High Seas Comdr.	

Auxiliary CSF
Minelaying
SS C of
North Sea.

0535

610
pm

Auxiliary hospital ship
Hansa departs Outer Jade.

To CSF: Line 2 in posi- Time is
tion. that of
Aux. Minelaying SS C. CSF

Heligoland Seydlitz 0500
Island

643
pm
*

To CSF Aircraft scouted
NW by W from Heligoland.
Saw submarine 50 miles
from Heligoland, submer-
ged quickly on approach.
Otherwise saw nothing up
to 100 miles. Airplane 21
back again at Heligoland.
Flight Station.

Seydlitz Friedrich
der 0631
Grosso

717
pm
*

To Flt Command: Taking
part in engagement were
several Town class cruis-
ers, several single armored
cruisers of Shannon type,
4 cruisers, battle, Lion
type, Stralsund & Strass-
burg will submit oral re-
port today. Large cruisers
anchor Schillig Roadstead.
CSF

Friedrich Seydlitz 0625
der
Grosse

725
pm

To CSF: Suggest you place
2 torpedoboat flotillas in
the outer outpost line.
High Seas Commander.

S-165 0625 0635

735
pm
*

G-169-094 epsilon 7 Sub-
marine torpedo passed
close by ahead. Torpedo
itself and submarine
readily seen. Fired upon
without result.

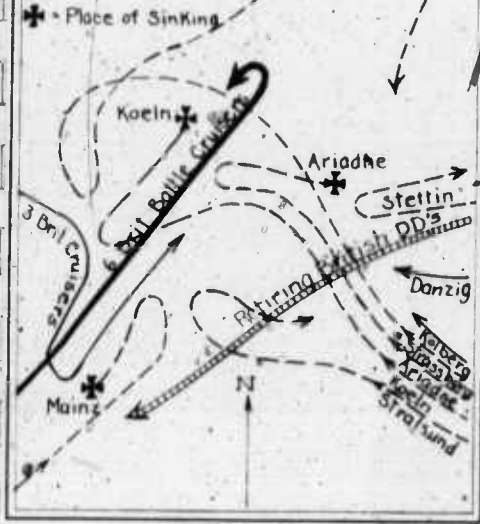
Borkum Seydlitz 0715
Island

746
pm
*

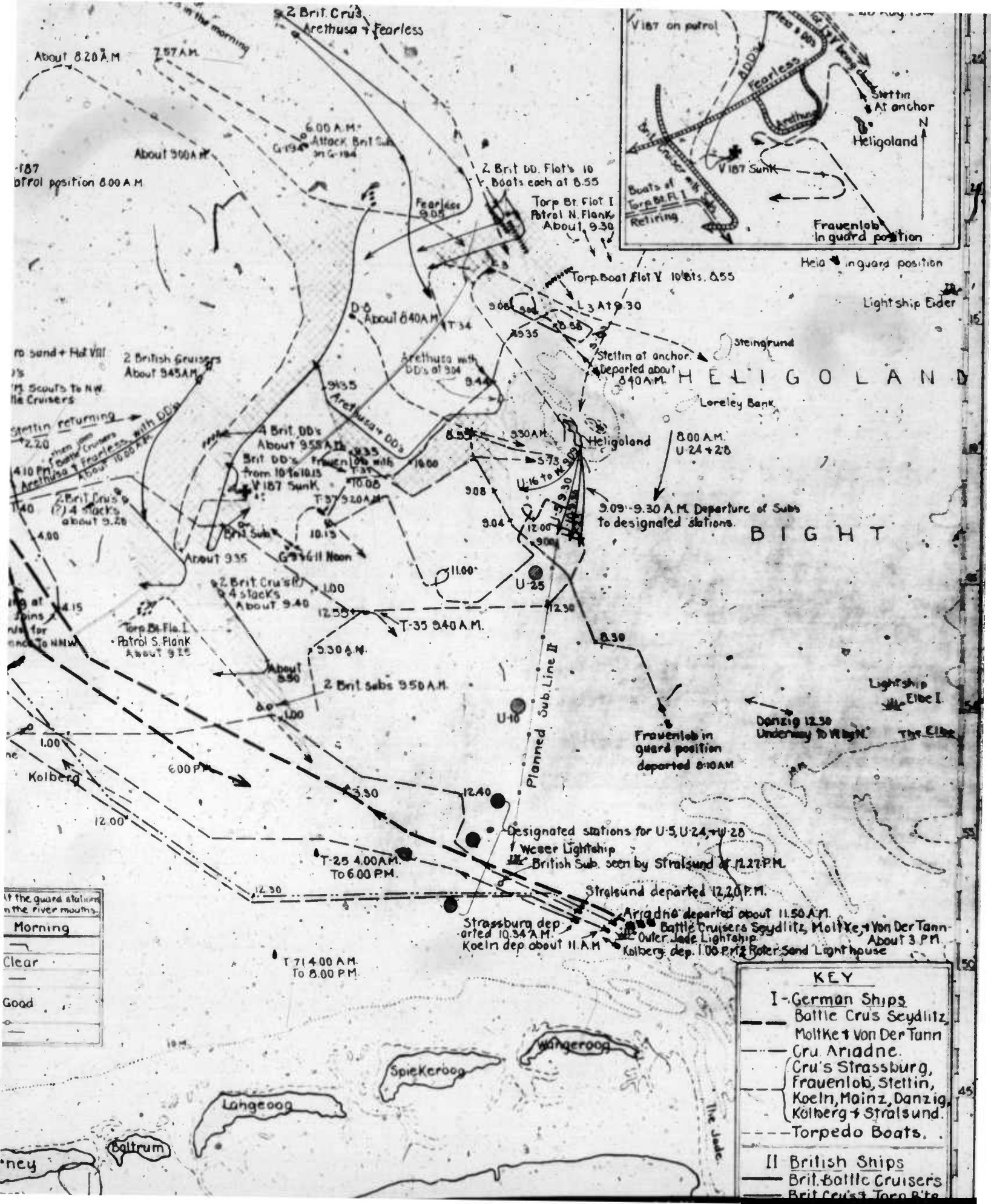
1 Submarine hove to in
05 9 epsilon did not an-
swer on recognition sig-
nal. Scouted with 2 air-
planes out from Borkum
NW 50 miles to Ameland.
Flight Sta. Borkum.

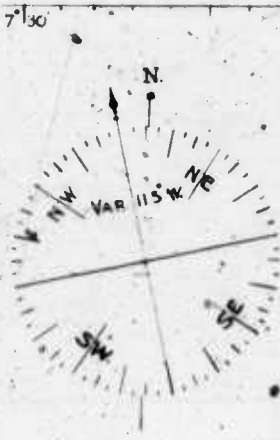


SECURITY OF THE GERMAN BIGHT
on the morning of 28 Aug. 1914.—

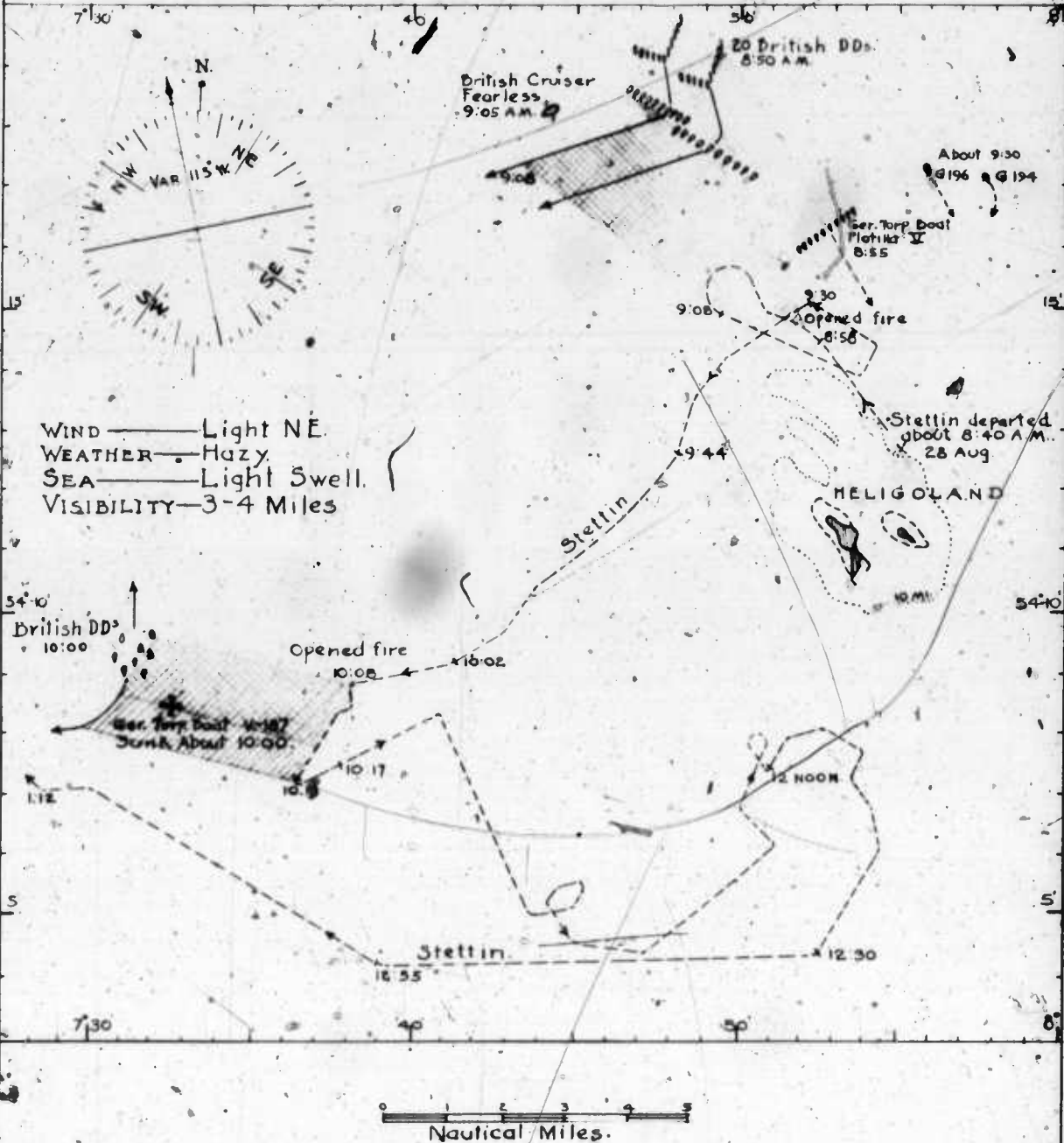


	Battle Area Around Heigoland	Area NW of Norderney light	At the guard post in the river mouth
	About 900 AM	About 100 PM	Morning
Wind	Light NE	Light NNE	—
Weather	Hazy	Hazy	Clear
Sea	Calm	Light swell	—
Visibility	3 1/4 Mi. near sunset Less higher up	3 1/4 Mi. in spots Somewhat clearer	Good
Sun	In SE	In SSW	—





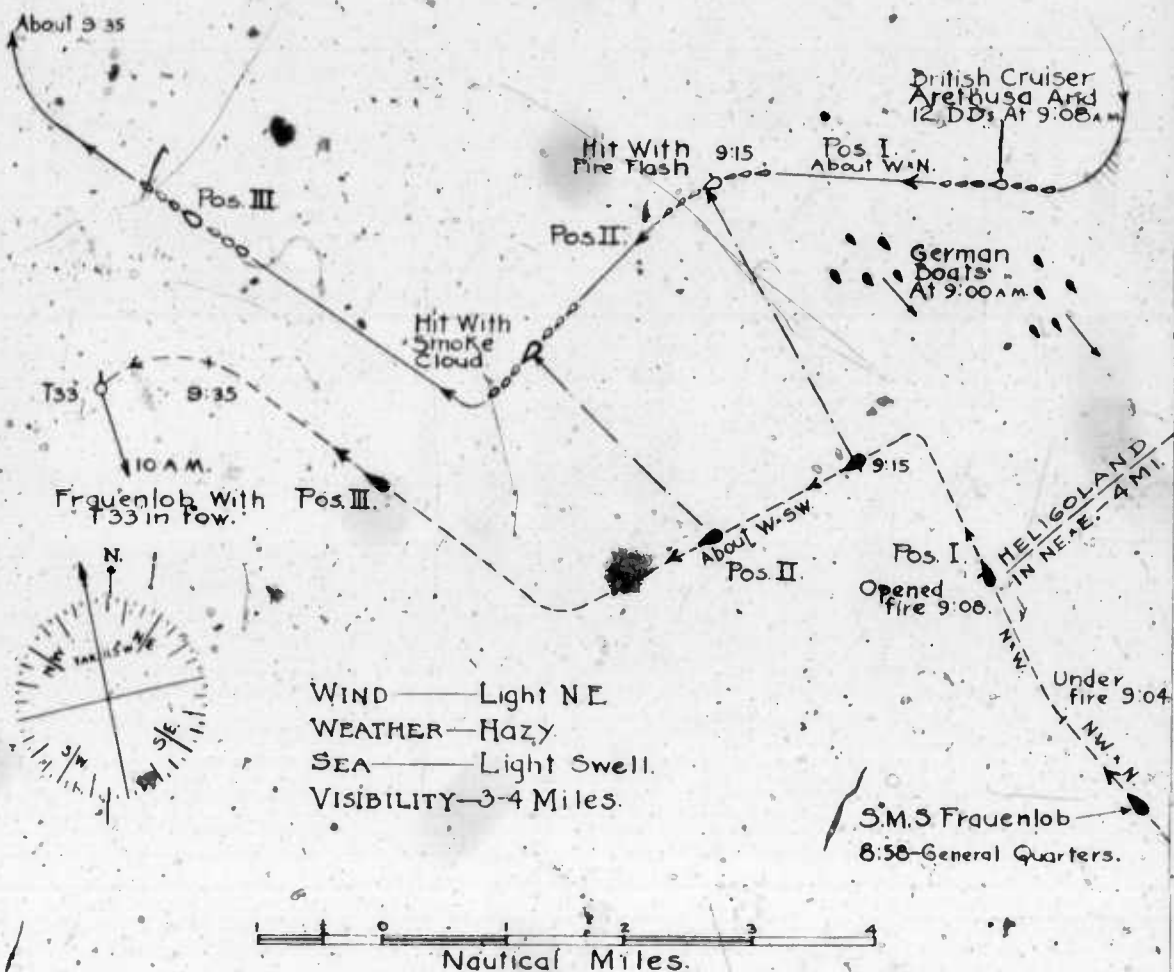
WIND ——— Light NE.
 WEATHER ——— Hazy.
 SEA ——— Light Swell.
 VISIBILITY — 3-4 Miles



THE ACTIONS OF STETTIN.

LEGEND:-

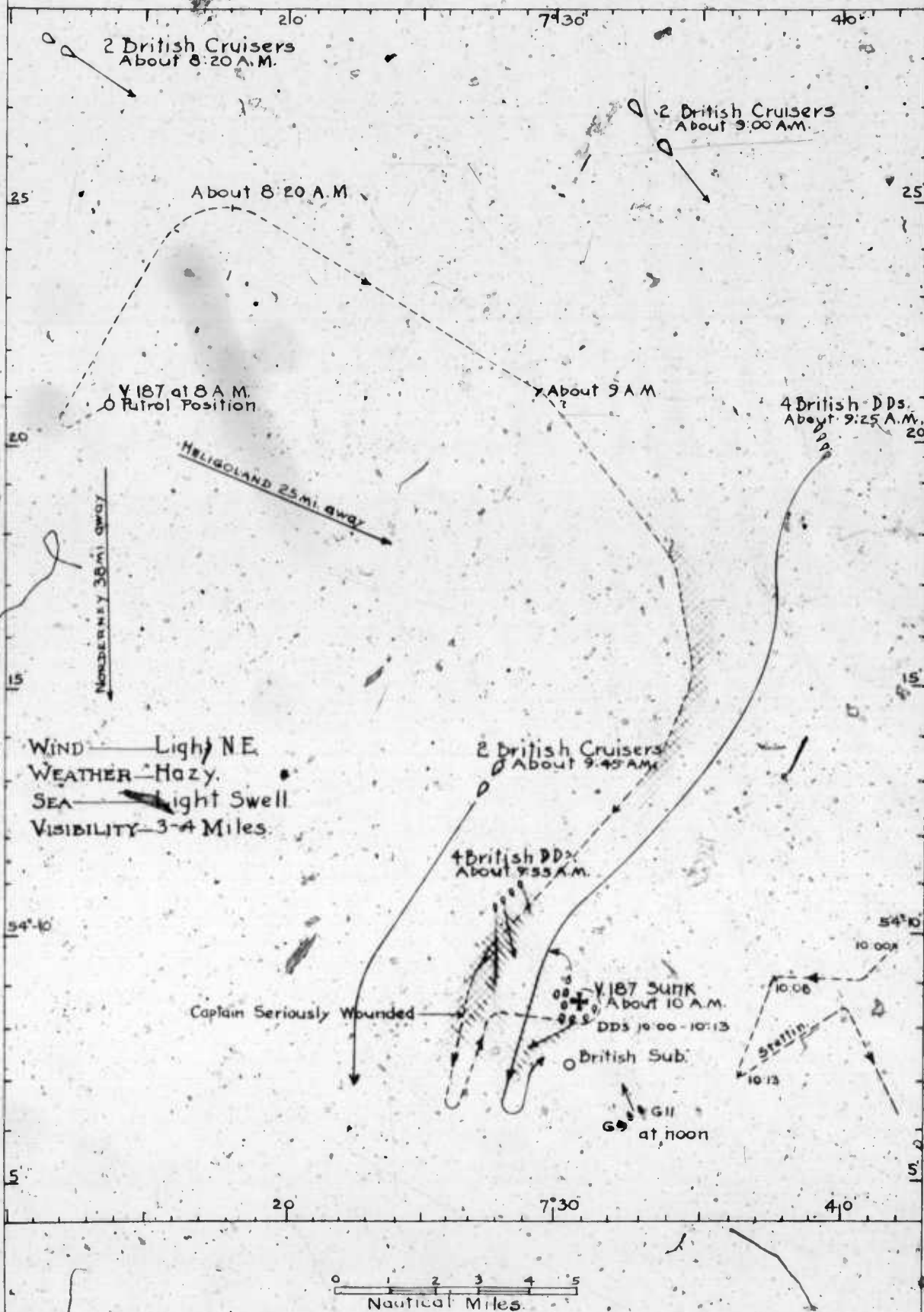
- British and German Gunfire.
- German Gunfire.



THE BATTLE OF FRAUENLOB.

LEGEND:-

British and German Gunfire.
British Gunfire.



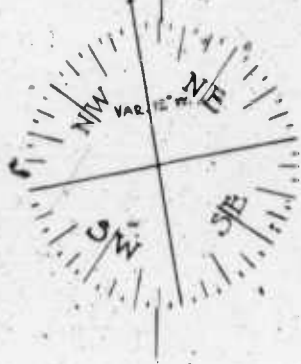
THE SINKING OF V-187.

LEGEND—

British and German Gunfire.

British Gunfire.

WEATHER—Hazy.
 SEA—Light Swell.
 VISIBILITY—Abt 4 Mi. Var.



15

10

5

54

50

7°E of Greenwich.



THE ACTION OF STRALSUND.

LEGEND—

British and German Gunfire.

Assisting Ariadne from 3 to 4 P.M.

HELIGOLAND 27 MI.

Ariadne Sunk 4 P.M.

Joined Battle Cruisers 4:35

2:10 3 British Town Cruisers.

DERKUM 37 MI.

NORDERNEY 27 MI.

5:30 To Outer Jade

S.M. Cruiser STRALSUND.

Departed from Outer Jade About 12:20 P.M.

2:06 2:10 2:12

2:00

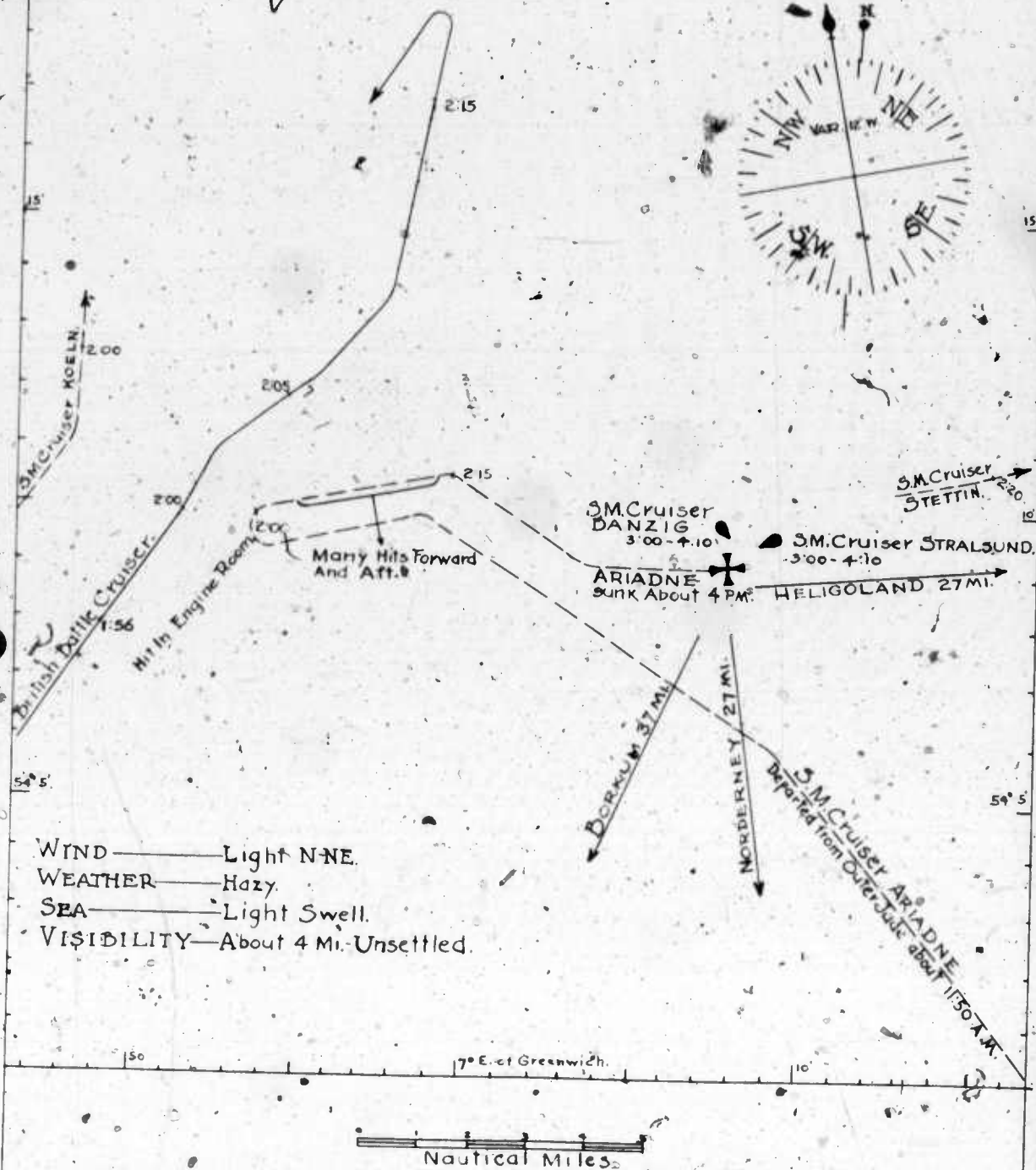
1:55

1:45

2:48

2:30

2015

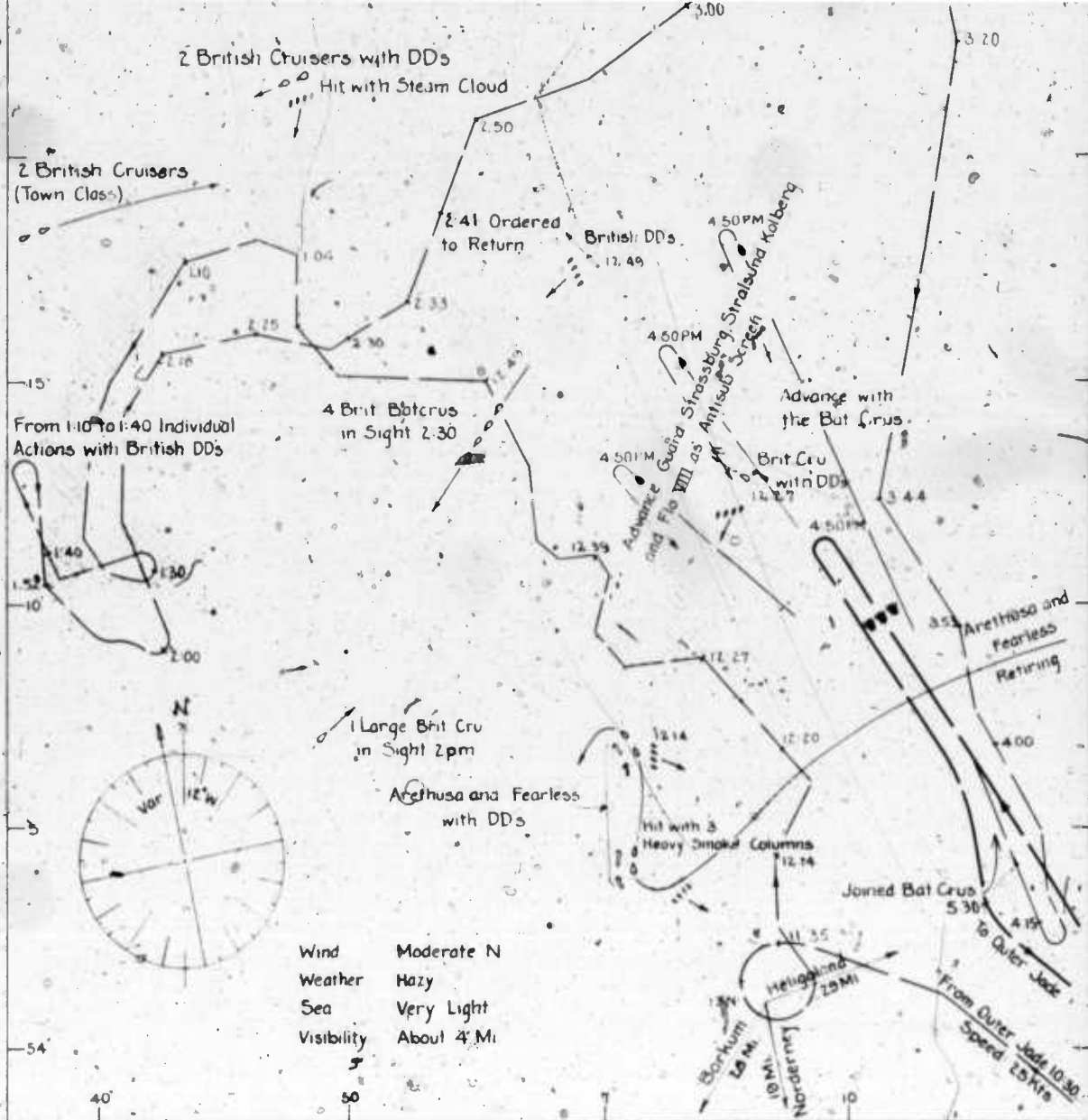


THE SINKING OF ARIADNE.

LEGEND:-

British and German Gunfire.

British Gunfire.



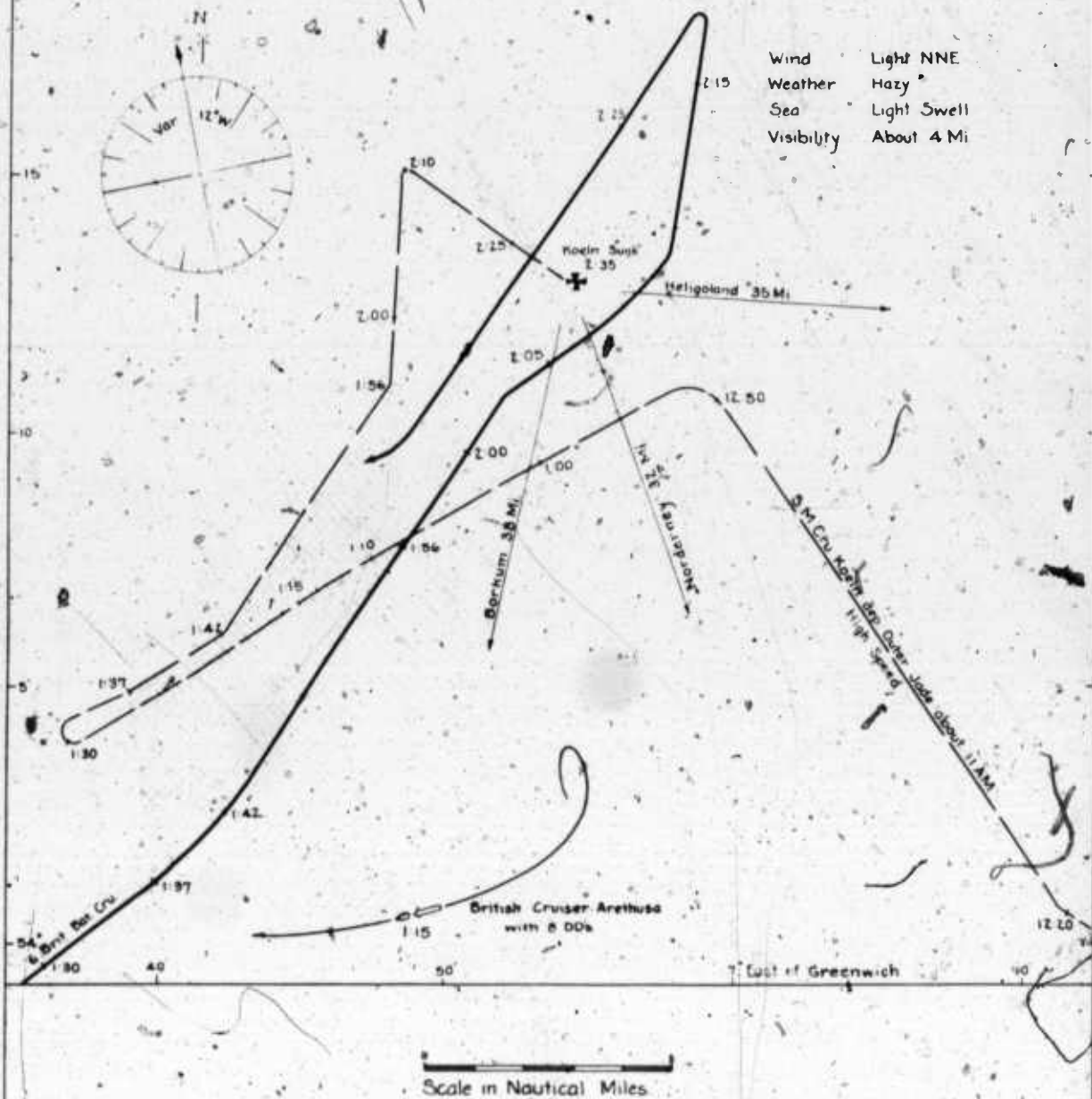
THE ACTIONS OF THE STRASSBURG

Legend

British Gunfire

British and German Gunfire

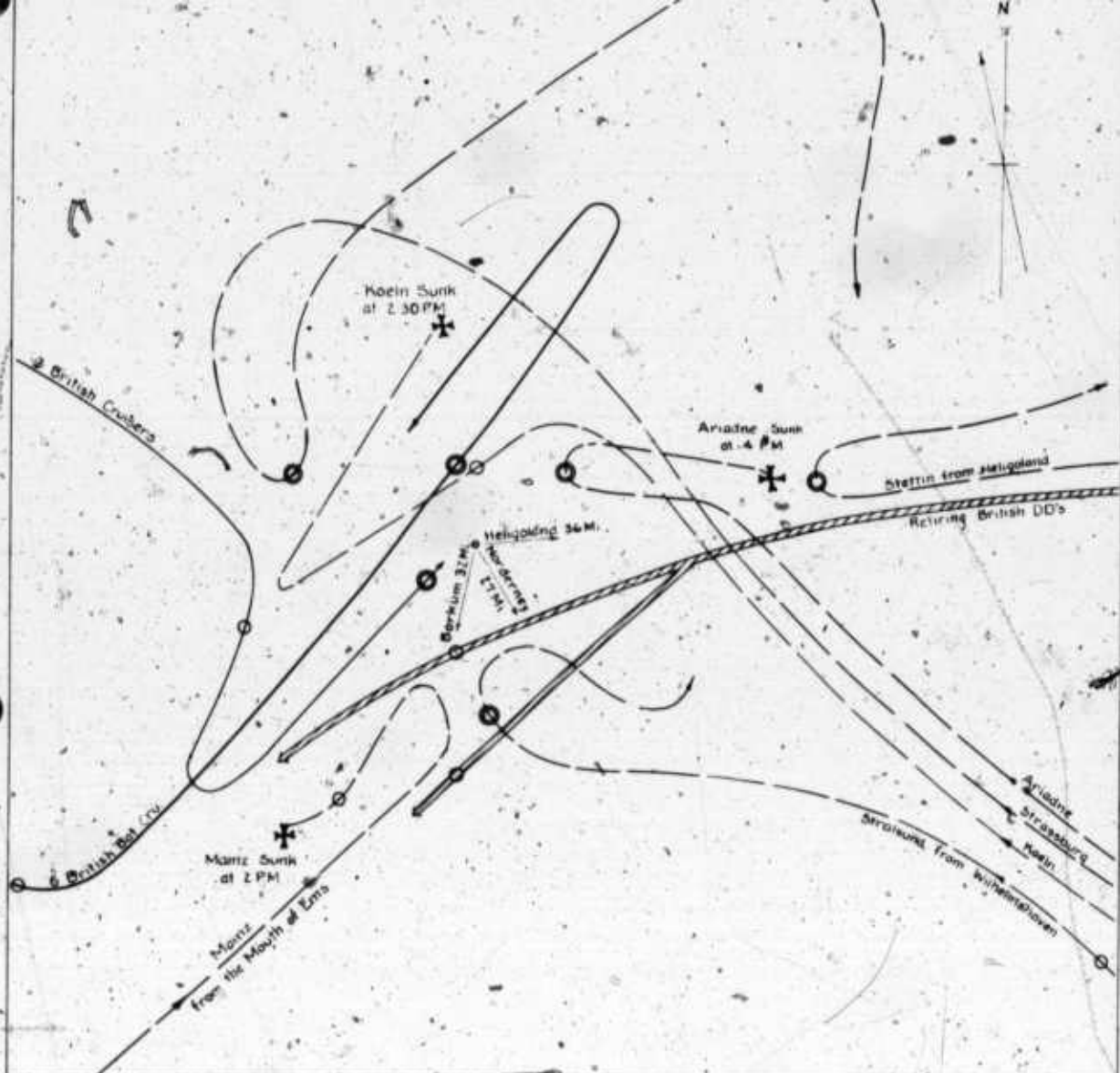
205



THE DESTRUCTION OF THE KOELN

Legend

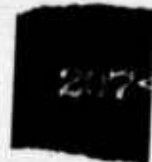
- British Gunfire
- German Gunfire
- British & German Gunfire



POSITIONS OF THE CRUISERS BETWEEN 1 AND 2 PM

Legend

- SM Cruisers, Koeln, Mainz, Ariadne, Strassburg, Stralsund, Stettin
- British Battlecruisers Lion, Queen Mary, Princess Royal, Inflexible, Invincible, New Zealand
- 3 British Cruisers of Birmingham Class
- British Destroyers with the Cruisers Arethusa and Fearless
- Positions about 1 P.M.
- Positions about 2 P.M.
- + Sinking of Koeln, Mainz, Ariadne





THE DEPLOYMENT OF THE GRAND FLEET AT THE BEGINNING OF THE WAR.

II FLEET **)
Vice Admiral
Sir Cecil Burney

Fleet Flagship Lord Nelson
Commander of the Battle Squadron
Rear Admiral Nicholson
Rear Admiral B. Currey

VII BATTLE SQUADRON
(Consisting of)

VII CRUISER
SQUADRON

IX CRUISER
SQUADRON
(consisting of)

V BATTLE SQUADRON

• Prince of Wales
• Agamemnon
• Bulwark
• Formidable
• Implacable
• Irresistible
• London
• Queen
• Venerable

VI BATTLE SQUADRON

• Russell
• Cornwallis
• Albemarle
• Duncan
• Exmouth
• Vengeance

V CRUISER SQUADRON

(Both squadrons soon dissolved and
ships used for special tasks)

Rear Admiral
A.P. Stoddart

• Carnarvon
• Falmouth
• Liverpool

VI CRUISER SQUADRON

Rear Admiral
W.L. Grant

• Drake
• Good Hope
• King Alfred
• Leviathan

MINELAYER SQUADRON

Captain,
M.H. Cobbe

• Naiaid
• Andromache
• Apollo
• Intrepid
• Iphigenia
• Latona
• Thetis

** II and III Fleet later

KEY TO SIGNS

• Battleship } Capital Ship
• Battlecruiser }
• Battleship
• Armored Cruiser
• Older Armored Cruiser
• Protected Cruiser
• Gunboat
• Mine

Table 31* (Part 1)

THE COMPOSITION OF THE GRAND FLEET AT THE BEGINNING OF THE WAR

According to Admiral Jellicoe

The War in the North Sea Vol I

III FLEET **)

VII BATTLE SQUADRON*) VIII BATTLE SQUADRON*)
(Consisting of Oldest battleships)

son
uadron VII CRUISER SQUADRON IX CRUISER SQUADRON X CRUISER SQUADRON XI CRUISER SQUADRON XII CRUISER SQUADRON
(consisting of oldest cruisers)

SQUADRON

l
llis
cle

ace

• Crescent
• Edgar
• Endymion
• Gibraltar
• Grafton
• Hawke
• Royal Arthur
• Theseus
(X Shortly after outbreak of war cruiser squadron assigned to Grand Fleet and used in blockade duty.)

MINELAYER SQUADRON

Captain,
M.H. Cobbe

• Naiad
• Andromache
• Apollo
• Intrepid
• Iphigenia
• Latona
• Thetis

**) II and III Fleet later united as II or "Channel Fleet."

KEY TO SIGNS

• Armored Cruiser • Older Armored Cruiser • Protected Cruiser • Gunboat • Minelayer

Command Designations

• Fleet Commander
• Comdr. of a Battle Sqd.
• Comdr. of a Cruiser Sqd.
• Second in command of a battle squadron
• Comdr. of other forces

Table 31 (Part 2)

COMPOSITION OF THE GRAND FLEET AT THE BEGINNING OF THE WAR

According to Admiral Jellicoe

Table 31

I BATTLE SQUADRON
Vice Admiral
Sir Lewis Bayly
Rear Admiral
Sir H. Evan-Thomas

- Marlborough
- St. Vincent
- Colossus
- Hercules
- Neptune
- Vanguard
- Collingwood
- Superb

Attached:

- Bellona
- Cyclops (Repair ship)

II BATTLE SQUADRON
Vice Admiral
Sir George Warrender
Rear Admiral
Sir Robert Arbuthnot

- King George V
- Orion
- Ajax
- Audacious
- Centurion
- Conqueror
- Monarch
- Thunderer

Attached:

- Boadicea
- Assistance (Repair ship)

IV BATTLE SQUADRON
Vice Admiral
Sir Douglas Gamble

- Dreadnought
- Temeraire
- Bellerophon

Attached:

- Blonde

III BATTLE SQUADRON
Vice Admiral
Sir E. E.
Rear Admiral
Sir E. E.

- King
- Hiberry
- Common
- Zealar
- Domin
- Africa
- Britan
- Hindus

Attached:

- Blanche

I Battlecruiser Squadron
Vice Admiral
Sir David Beatty

- Lion
- Princess Royal
- Queen Mary
- New Zealand

II CRUISER SQUADRON
Rear Admiral the Hon.
Sir Gough-Calthorpe

- Shannon
- Achilles
- Cochrane
- Natal

III CRUISER SQUADRON
Rear-Admiral
W.C. Pakenham

- Antrim
- Argyll
- Devonshire
- Roxburgh

I LIGHT CRUISER SQUADRON
Commodore
W. E.

- South
- Birml
- Lowel
- Notth

DESTROYER FLOTILLAS

II FLOTILLA
Captain
J.R. P. Hawksley

- Active

DESTROYERS

- Acorn
- Alarm
- Brisk
- Cameleon
- Comet
- Fury
- Goldfinch
- Hope
- Larne
- Lyra
- Martin
- Minstrel
- Nemesis
- Nereide
- Nymph
- Redpole
- Rifleman
- Ruby
- Sheldrake
- Staunch

IV FLOTILLA
Captain
C.J. Wintour

- Swift

DESTROYERS

- Acasta
- Achates
- Ambuscade
- Ardent
- Christopher
- Cockatrice
- Contest
- Fortune
- Garland
- Hardy
- Lynx
- Midge
- Owl
- Paragon
- Porpoise
- Shark
- Sparrowhawk
- Spitfire
- Unity
- Victor

Minesweeper-
Gunboats
Commander
L.G. Preston

- Skipjack (still absent)
- Circe
- Gossamer
- Leda
- Speedwell
- Jason
- Snagull

SHETLAND
PATROL
• For each
and 4 de
of River

HARWICH FORCES
II FLOTILLA
Captain
W. Blunt

- Fearless
- 20 Destroyers*)

III FLOTILLA
Captain
C.H. Fox

- Amphion
- 15 Destroyers

TABLE 31 (Continued)
next page-II Fleet, III Fl

*) Names and numbers of ships of these units are not given but appear in part in Table 2. The B and C classes, which were detached for the protection of the English coast and the ports of operated out of Harwich in agreement with the Admiralty and were not under the command of Admi

SQUADRON
 al
 orge Warrender
 al
 rt Arbuthnot

orge V

ous
 on
 er

er

d:

Assistance
 (Repair ship)

ER SQUADRON
 al the Hon.
 gh-Calthorpe

on
 es
 ne

LA

tour

S

er

wk

IV BATTLE SQUADRON
 Vice Admiral
 Sir Douglas Gamble

- Dreadnought
- Temeraire
- Bellerophon

Attached:

- Blonde

III BATTLE SQUADRON
 Vice Admiral
 S. E. Bradford
 Rear Admiral
 M. E. Browning

- King Edward VII
- Hibernia
- Commonwealth
- Zealandia
- Dominion
- Africa
- Britannia
- Hindustan

Attached:

- Blanche

On 7 Aug. detailed
 from Battle Squadron VI:
 Russell
 Albermarle
 Exmouth

III CRUISER SQUADRON
 Rear-Admiral
 W. C. Pakenham

- Antrim
- Argyll
- Devonshire
- Roxburgh

Minesweeper-
 Gunboats
 Commander
 L. G. Preston

- Skipjack
 (still absent)
- Circe
- Gossamer
- Leda
- Speedwell
- Jason
- Seagull

I LIGHT CRUISER SQUADRON
 Commodore
 W. E. Goodenough

- Southampton
- Birmingham
- Lowestoft
- Nottingham

SHETLAND
 PATROL FORCE
 • Forard (Scout)
 and 4 destroyers
 of River Class)

HARWICH FORCES
 I FLOTILLA
 Captain
 W. Blunt

- Fearless
 20 Destroyers*)

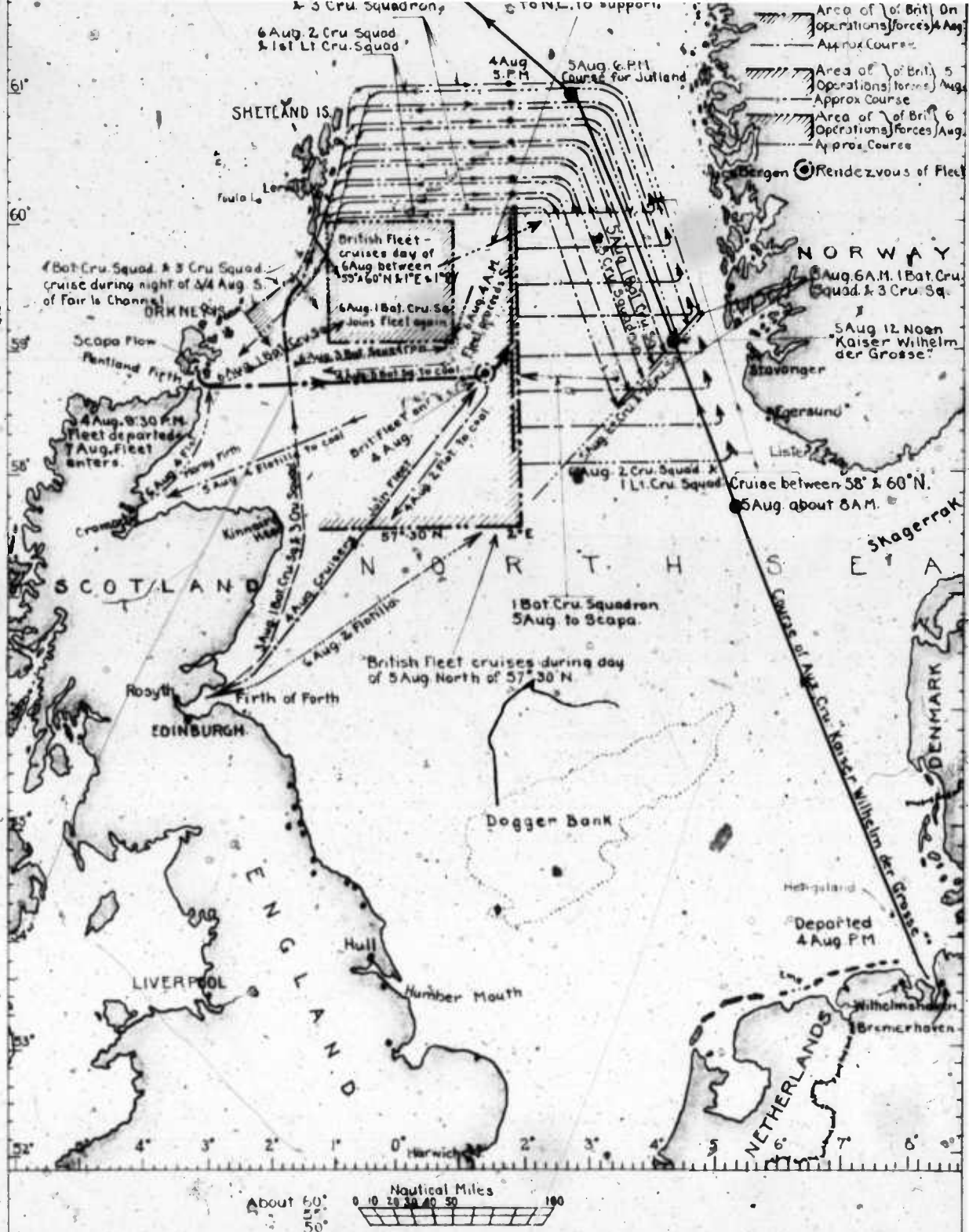
III FLOTILLA
 Captain
 C. H. Fox

- Amphion
 15 Destroyers*)

TABLE 31 (Continued on
 next page-II Fleet, III Fleet, Key to Signs)

ese units are not given but appear in part in Table 2. The submarines, except the
 ed for the protection of the English coast and the ports of Rosyth to the southward,
 t with the Admiralty and were not under the command of Admiral Jellicoe. The boats

210



The first cruise of the Grand Fleet
4-6 Aug. 1914
Schematic Sketch

Area of operations
Approximate courses of British forces, on 7 Aug.

8 Aug.

9 Aug.

10 Aug.

11 Aug.

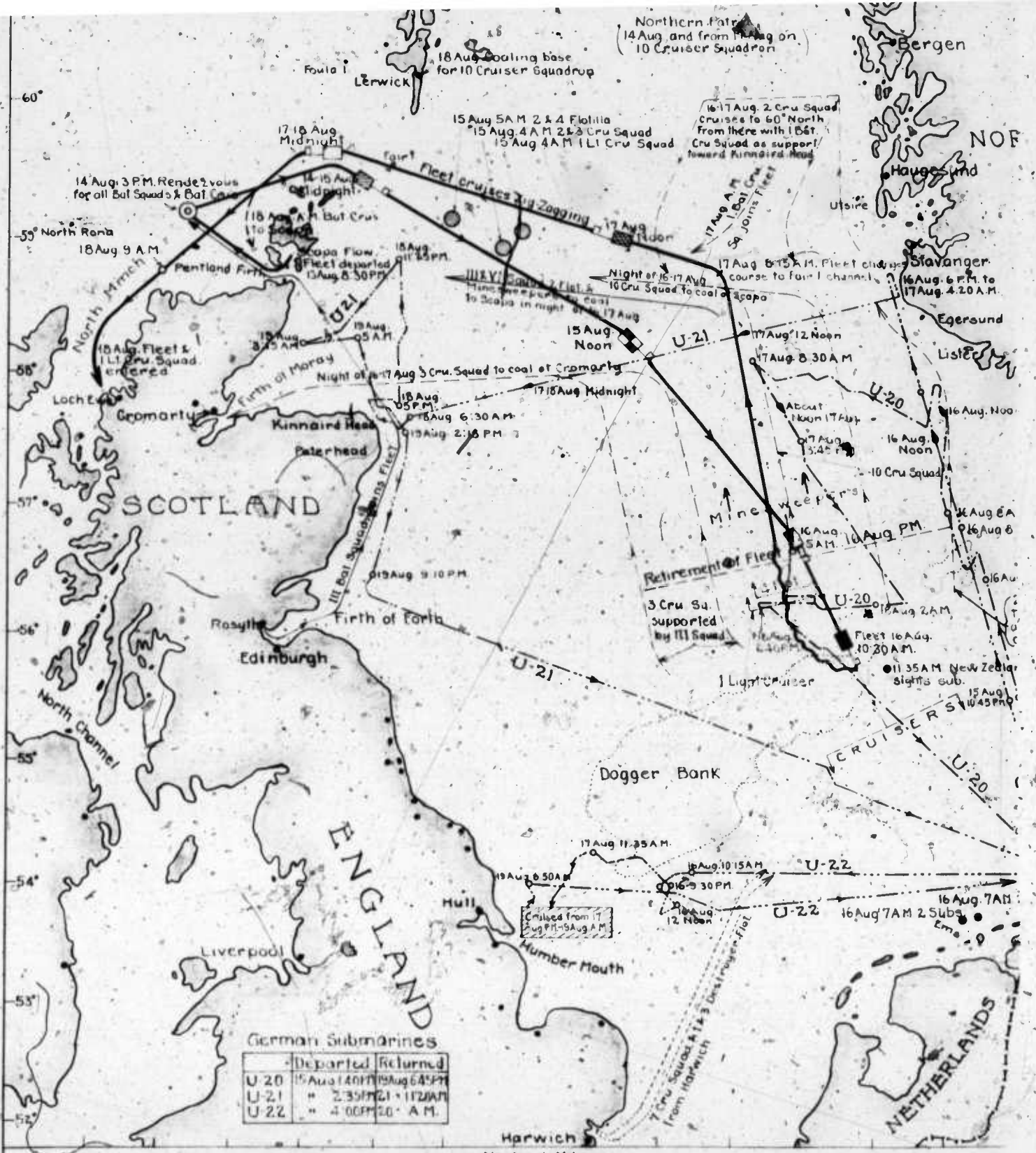
12 Aug.

Scale in Nautical Miles

8 Aug
9 Aug
~~10 Aug~~
11 Aug
12 Aug

SCHEMATIC SKETCH

Northern Patrol
14 Aug. and from 14 Aug on
10 Cruiser Squadron



THE THIRD ADVANCE INTO THE SOUTHERN NORTH SEA
Third Cruise 14-18 Aug. 1914.
Schematic Sketch

